

This safety data sheet was created pursuant to the requirements of:
UK REACH Regulations (SI 2019/758 as amended)

Revision date 14-Nov-2025

Revision Number 2

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Code(s)	59851***
Safety data sheet number	59851***
Product Name	HYDROCARBONS, C10-C13, AROMATICS, < 1% NAPHTHALENE
EC Number	922-153-0***
Synonyms	SOLVESSO 200 ND, SOLVESSO 200 NAPHTHA DEPLT, SOLVENT NAPHTHA 200ND***
Pure substance/mixture	Substance***

Contains HYDROCARBONS C10 - 13 AROMATICS <1% NAPHTHALENE

Molecular weight	168***
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1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use	Solvent Intermediate Cleaning agent Coatings Use in agrochemicals Chemicals used in the synthesis and / or formulation of industrial products Laboratory chemicals Polymers Fuels Functional fluids***
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1.3. Details of the supplier of the safety data sheet

Supplier

Univar Solutions UK Ltd
Aquarius House
6 Mid Point Business Park
Bradford
GBR

For further information, please contact

E-mail address	SDS.EMEA@univarsolutions.com
Non-Emergency Telephone Number	+44 1274 267300 / +44 1274 267306

1.4. Emergency telephone number

Emergency Telephone	SGS - +32 (0)3 575 55 55 (24h)
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Aspiration hazard	Category 1*** - (H304)***
Chronic aquatic toxicity	Category 2*** - (H411)***

2.2. Label elements

Contains HYDROCARBONS C10 - 13 AROMATICS <1% NAPHTHALENE



Signal word

Danger***

Hazard statements

H304 - May be fatal if swallowed and enters airways

H411 - Toxic to aquatic life with long lasting effects***

EUH066 - Repeated exposure may cause skin dryness or cracking***

Precautionary statements

P273 - Avoid release to the environment

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor

P331 - Do NOT induce vomiting

P391 - Collect spillage

P501 - Dispose of contents/ container to an approved waste disposal plant***

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances***

Chemical name	Weight-%	EC No (EU Index No)	UK REACH registration number	Classification according to GB CLP (SI 2020/1567 as amended)	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
HYDROCARBONS C10 - 13 AROMATICS <1% NAPHTHALENE***	90 - 100%	922-153-0***	01-2250044631-9-XXX X***	Aquatic Chronic 2 (H411) Asp. Tox. 1 (H304)***	-	-	-
Non hazardous	0 - 10%	-	-	-	-	-	-

filler*** NOCAS							
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Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (UK REACH Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.***
Inhalation	Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur.***
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor.
Ingestion	ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical attention.***
Self-protection of the first aider	Use personal protective equipment as required.***

4.2. Most important symptoms and effects, both acute and delayed

Symptoms	Difficulty in breathing. Coughing and/ or wheezing. Dizziness.***
Inhalation	Coughing and/or wheezing. Difficulty in breathing. Dizziness.***
Dermal	Repeated exposure may cause skin dryness or cracking.***
Ingestion	May be fatal if swallowed and enters airways***

4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors	Because of the danger of aspiration, emesis or gastric lavage should not be used unless the risk is justified by the presence of additional toxic substances.***
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Dry chemical, CO2, alcohol-resistant foam or water spray.***
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products Carbon oxides.***

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protective equipment as required.***

Other information Refer to protective measures listed in Sections 7 and 8.***

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation.

General hygiene considerations Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep at temperature > 01 °C.***

Packaging materials Suitable container/equipment material: stainless steel. Carbon Steel. Polyester resin. Teflon. Unsuitable container/equipment material: Polystyrene. Polypropylene.***

7.3. Specific end use(s)

Specific use(s)
See section 1 for more information.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological occupational exposure limits This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) - Workers ***

Chemical name	Oral	Dermal	Inhalation
HYDROCARBONS C10 - 13 AROMATICS <1% NAPHTHALENE*** -		12.5 mg/kg/day [4] [6]***	151 mg/m ³ [4] [6]***

[4] Systemic health effects.***
[6] Long term.***

Derived No Effect Level (DNEL) - General Public ***

Chemical name	Oral	Dermal	Inhalation
HYDROCARBONS C10 - 13 AROMATICS <1% NAPHTHALENE*** -	7.5 mg/kg/day [4] [6]***	7.5 mg/kg/day [4] [6]***	32 mg/m ³ [4] [6]***

[4] Systemic health effects.***
[6] Long term.***

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering controls No information available.

Personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Use eye protection according to EN 166.***

Hand protection Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. Gloves must conform to standard EN 374.***

Skin and body protection No special protective equipment required.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Type A.***

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid***
Appearance	Clear liquid***
Colour	Colourless to pale yellow***
Odour	Aromatic.***
Odour threshold	No information available

Property	Values	Remarks • Method
Melting point / freezing point		No information available.
Initial boiling point and boiling range	246*** -*** 302*** °C***	ASTM D 86.***
Flammability		No information available.
Flammability Limit in Air		No information available.
Upper flammability or explosive limits	6.0%***	
Lower flammability or explosive limits	0.8%***	
Flash point	116*** -*** °C***	Pensky-Martens closed cup. (ASTM D93).***
Autoignition temperature	462*** °C***	ASTM E 659.***
Decomposition temperature		No information available.
pH		No information available.
pH (as aqueous solution)		No information available.
Kinematic viscosity	2.70*** cSt***	40.0 °C.***
Dynamic viscosity		No information available.
Water solubility	Immiscible with water***	***
Solubility(ies)		No information available.
Partition coefficient	log Pow: > 4***	***
Vapour pressure	< 0.01 mmHg***	@ 20.0 °C.***
Relative density	0.98***	15.0 °C.***
Bulk density	980 kg/m ³ ***	***
Liquid Density	No information available	No information available
Relative vapour density	5.8***	***
Particle characteristics		No information available.
Particle Size	No information available	
Particle Size Distribution	No information available	
Explosive properties	Not considered to be explosive.***	
Oxidising properties	Does not meet the criteria for classification as oxidising***	

9.2. Other information

Molecular weight	168*** < 0.01 (butyl acetate = 1)***
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Stable under recommended storage conditions.***
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10.2. Chemical stability

Stability	Stable under normal conditions.
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Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Excessive heat.***

10.5. Incompatible materials

Incompatible materials Strong oxidising agents.***

10.6. Hazardous decomposition products

Hazardous decomposition products Carbon oxides.***

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

Inhalation Aspiration into lungs can produce severe lung damage. May cause irritation.***

Eye contact May cause temporary eye irritation.***

Skin contact Repeated exposure may cause skin dryness or cracking.***

Ingestion May be fatal if swallowed and enters airways.***

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Difficulty in breathing. Coughing and/ or wheezing. Dizziness.***

Acute toxicity

Numerical measures of toxicity

No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Repeated exposure may cause skin dryness or cracking.***

HYDROCARBONS C10 - 13 AROMATICS <1% NAPHTHALENE (-)

Method	Species	Exposure route	Effective dose	Exposure time	Results
					Repeated exposure may cause skin dryness or cracking non-irritant***

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitisation No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard May be fatal if swallowed and enters airways.***

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Toxic to aquatic life with long lasting effects.***

HYDROCARBONS C10 - 13 AROMATICS <1% NAPHTHALENE (-)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
	Oncorhynchus mykiss (rainbow trout)***	LC50***	3.6 mg/L ***	96 hours***	
	Daphnia magna***	EC50***	1.1 mg/L ***	48 hours***	
	Algae***	EL50***	7.9 mg/L ***	72 hours***	
	Algae***	NOEC***	0.22 mg/L ***	72 hours***	

12.2. Persistence and degradability

Persistence and degradability Readily biodegradable.***

HYDROCARBONS C10 - 13 AROMATICS <1% NAPHTHALENE (-)

Method	Exposure time	Value	Results
			Readily biodegradable***

12.3. Bioaccumulative potential

Bioaccumulation No information available.***

12.4. Mobility in soil

Mobility in soil Insoluble.***

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
HYDROCARBONS C10 - 13 AROMATICS <1% NAPHTHALENE***	The substance is not PBT / vPvB***

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information

IATA

14.1 UN number or ID number UN3082***
 14.2 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (HYDROCARBONS C10 - 13 AROMATICS <1% NAPHTHALENE)***
 14.3 Transport hazard class(es) 9***
 14.4 Packing group III***
 14.5 Environmental hazards Yes***
 14.6 Special precautions for user
 Special Provisions A97, A158, A197***
 ERG Code 9L***

IMDG

14.1 UN number or ID number UN3082***
 14.2 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (HYDROCARBONS C10 - 13 AROMATICS <1% NAPHTHALENE)***
 14.3 Transport hazard class(es) 9***
 14.4 Packing group III***
 14.5 Environmental hazards Yes***
 14.6 Special precautions for user
 Special Provisions 274, 335, 969***
 EmS-No F-A, S-F***
 14.7 Maritime transport in bulk according to IMO instruments No information available

RID

14.1 UN number or ID number UN3082***
 14.2 UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (HYDROCARBONS C10 - 13 AROMATICS <1% NAPHTHALENE)***
 14.3 Transport hazard class(es) 9***
 14.4 Packing group III***

14.5 Environmental hazards	Yes***
14.6 Special precautions for user	
Special Provisions	274, 335, 375, 601***
Classification code	M6***
ADR	
14.1 UN number or ID number	UN3082***
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (HYDROCARBONS C10 - 13 AROMATICS <1% NAPHTHALENE)***
14.3 Transport hazard class(es)	9***
14.4 Packing group	III***
14.5 Environmental hazards	Yes***
14.6 Special precautions for user	
Special Provisions	274, 335, 601, 375***
Classification code	M6***
Tunnel restriction code	(-)*

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations ***

Authorisations and/or restrictions on use:

This product contains one or more substances subject to restriction (UK REACH - Annex XVII).
This product does not contain substances subject to authorisation (UK REACH - Annex XIV).***

Persistent Organic Pollutants

Not applicable

Export Notification requirements

Not applicable

Dangerous substance category per COMAH Regulations 2015 (as amended)

E2 - Hazardous to the Aquatic Environment in Category Chronic 2***

Named dangerous substances per COMAH Regulations 2015 (as amended)

Not applicable

The Ozone-Depleting Substances Regulations 2015

Not applicable

The Biocidal Products Regulations 2001 (as amended)

Not applicable

The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)

Not applicable

Poisons Act 1972 (Explosive Precursors) Regulations (as Amended)

Not applicable

International Inventories

TSCA	Contact supplier for inventory compliance status
DSL/NDL	Contact supplier for inventory compliance status
EINECS/ELINCS	Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status

KECI	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AIIC	Contact supplier for inventory compliance status
NZIoC	Contact supplier for inventory compliance status

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AIIC - Australian Inventory of Industrial Chemicals
NZIoC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report A Chemical Safety Assessment has been carried out for this substance***

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

H304 - May be fatal if swallowed and enters airways
H411 - Toxic to aquatic life with long lasting effects***

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitisers		

Revision Note ***Indicates updated data since last publication

Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity***	Calculation method***
Acute dermal toxicity***	Calculation method***
Acute inhalation toxicity - gas***	Calculation method***
Acute inhalation toxicity - vapour***	Calculation method***
Acute inhalation toxicity - dust/mist***	Calculation method***
Skin corrosion/irritation***	Calculation method***
Serious eye damage/eye irritation***	Calculation method***
Respiratory sensitisation***	Calculation method***
Skin sensitisation***	Calculation method***
Mutagenicity***	Calculation method***
Carcinogenicity***	Calculation method***
Reproductive toxicity***	Calculation method***
STOT - single exposure***	Calculation method***
STOT - repeated exposure***	Calculation method***
Acute aquatic toxicity***	Calculation method***
Chronic aquatic toxicity***	Calculation method***
Aspiration hazard***	Calculation method***
Ozone***	Calculation method***

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
European Chemicals Agency (ECHA) (ECHA_API)
Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
Organisation for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Prepared By Jitendra Panchal***

Revision date 14-Nov-2025

**This material safety data sheet complies with the requirements of UK REACH Regulations (SI 2019/758 as amended)
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work**

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Chemical name Hydrocarbons, C10-C13, aromatics, <1% naphthalene
Pure substance/mixture Substance
REACH registration number 01-2119451097-39-XXXX
EC No (EU Index No) 922-153-0
Supplier Univar Solutions UK Ltd
 Aquarius House
 6 Mid Point Business Park
 Bradford
 GBR

Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

E-mail address SDS.EMEA@univarsolutions.com

Section 1 - Title

Title Manufacture of substance
Type Worker
Main user group Industrial uses: Uses of substances as such or in preparations at industrial sites
Environmental release category(ies) ERC1 - Manufacture of substances ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles
Specific Environmental Release Category ESVOC SpERC 1.1.v1
Process category(ies) PROC1 - Use in closed process, no likelihood of exposure
 PROC2 - Use in closed, continuous process with occasional controlled exposure
 PROC3 - Use in closed batch process (synthesis or formulation)
 PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises
 PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
 PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
 PROC15 - Use as laboratory reagent

Sector(s) of use SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites SU8 - Manufacture of bulk, large scale chemicals (including petroleum products) SU9 - Manufacture of fine chemicals SU10 - Formulation [mixing] of preparations and/or re-packaging (excluding alloys)

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Environmental release category(ies) - ERC1 - Manufacture of substances
 - ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles
Specific Environmental Release Category - ESVOC SpERC 1.1.v1

Amounts used

Type	Annual site tonnage
Value	2600
Units	t(ons)/year
Type	Fraction of EU tonnage used in region
Value	0.1

Type	Fraction of regional tonnage used locally
Value	1

Type	Maximum daily site tonnage
Value	26000
Units	kg/d

Type	Regional use tonnage
Value	2600
Units	t(ons)/year

Product characteristics

Remarks	Substance is complex UVCB
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Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	100
Release fraction to air from process (initial release prior to RMM)	0.001
Release fraction to wastewater from process (initial release prior to RMM)	0.0001
Release fraction to soil from process (initial release prior to RMM)	0.0003
Remarks	Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to municipal sewage treatment plant

Assumed domestic sewage treatment plant flow	10000 m3/d
Removal efficiency fraction (offsite; STP)	91.6%
Removal efficiency (total)	91.6%
Sludge treatment	Do not apply industrial sludge to natural soils Sludge should be incinerated, contained or reclaimed
Remarks	If discharging to domestic sewage treatment plant, no onsite wastewater treatment required

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Risk management measures

Technical onsite conditions and measures to reduce or limit discharges, air emissions	Risk from environmental exposure is driven by freshwater sediment Prevent discharge of undissolved substance to or recover from onsite wastewater
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Control measures to prevent releases

Air	Treat air emission to provide a typical removal efficiency of 90%
Water	If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of 0% Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of 62.3% Not applicable as there is no release to wastewater

Conditions and measures related to external recovery of waste

Method	During manufacturing no waste of the substance is generated
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Conditions and measures related to external treatment of waste for disposal

Disposal	During manufacturing no waste of the substance is generated
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Control of worker exposure

Title	General measures applicable to all activities
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	H304 - May be fatal if swallowed and enters airways Do NOT induce vomiting
Organisational measures to prevent /limit releases, dispersion and exposure	Do not ingest. If swallowed then seek immediate medical assistance
Remarks	Assumes a good basic standard of occupational hygiene is implemented

Section 3 - Exposure estimation

Environmental release category(ies) - ERC1 - Manufacture of substances
- ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles
Specific Environmental Release Category - ESVOC SpERC 1.1.v1

Predicted No Effect Concentration (PNEC)

Calculation method The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model
Msafe 120000 kg/d
Remarks Qualitative approach used to conclude safe use

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	12.5 mg/kg bw/d
Worker - inhalative, long-term - systemic	151 mg/m ³
Consumer - oral, long-term - systemic	7.5 mg/kg bw/d
Consumer - dermal, long-term - systemic	7.5 mg/kg bw/d
Consumer - inhalative, long-term - systemic	32 mg/m ³

Remarks Qualitative approach used to conclude safe use

Section 4 - Guidance to check compliance with the exposure scenario

Further details on scaling and control technologies are provided in SpERC factsheet. Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Air. Risk characterisation ratio (RCR). <= 0.0000092.

Waste. Water. Risk characterisation ratio (RCR). <= 0.222712987.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Available hazard data does not support the need for a DNEL to be established for other health effects.

Risk management measures are based on qualitative risk characterization.

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Chemical name	Hydrocarbons, C10-C13, aromatics, <1% naphthalene
Pure substance/mixture	Substance
REACH registration number	01-2119451097-39-XXXX
EC No (EU Index No)	922-153-0
Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford GBR
Non-Emergency Telephone Number	+44 1274 267300 / +44 1274 267306
E-mail address	SDS.EMEA@univarsolutions.com

Section 1 - Title

Title	Distribution of substance
Type	Worker
Main user group	Industrial uses: Uses of substances as such or in preparations at industrial sites
Environmental release category(ies)	ERC1 - Manufacture of substances ERC2 - Formulation of preparations (mixtures) ERC3 - Formulation in materials ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles ERC5 - Industrial use resulting in inclusion into or onto a matrix ERC6a - Industrial use resulting in manufacture of another substance (use of intermediates) ERC6b - Industrial use of reactive processing aids ERC6c - Industrial use of monomers for manufacture of thermoplastics ERC6d - Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers ERC7 - Industrial use of substances in closed systems
Specific Environmental Release Category	ESVOC SpERC 1.1b.v1
Process category(ies)	PROC1 - Use in closed process, no likelihood of exposure PROC2 - Use in closed, continuous process with occasional controlled exposure PROC3 - Use in closed batch process (synthesis or formulation) PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC9 - Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC15 - Use as laboratory reagent
Sector(s) of use	SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites SU8 - Manufacture of bulk, large scale chemicals (including petroleum products) SU9 - Manufacture of fine chemicals

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

- Environmental release category(ies)** - ERC1 - Manufacture of substances
- ERC2 - Formulation of preparations (mixtures)
 - ERC3 - Formulation in materials
 - ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles
 - ERC5 - Industrial use resulting in inclusion into or onto a matrix

- ERC6a - Industrial use resulting in manufacture of another substance (use of intermediates)
- ERC6b - Industrial use of reactive processing aids
- ERC6c - Industrial use of monomers for manufacture of thermoplastics
- ERC6d - Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers
- ERC7 - Industrial use of substances in closed systems

Specific Environmental Release Category - ESVOC SpERC 1.1b.v1

Amounts used

Type	Annual site tonnage
Value	1
Units	t(ons)/year

Type	Fraction of EU tonnage used in region
Value	0.1

Type	Fraction of regional tonnage used locally
Value	0.002

Type	Maximum daily site tonnage
Value	50
Units	kg/d

Type	Regional use tonnage
Value	500
Units	t(ons)/year

Product characteristics

Remarks	Substance is complex UVCB
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Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	20
Release fraction to air from process (initial release prior to RMM)	0.0001
Release fraction to wastewater from process (initial release prior to RMM)	0.00001
Release fraction to soil from process (initial release prior to RMM)	0.00001
Remarks	Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to municipal sewage treatment plant

Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	91.6%
Removal efficiency (total)	91.6%
Sludge treatment	Do not apply industrial sludge to natural soils Sludge should be incinerated, contained or reclaimed

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Risk management measures

Technical onsite conditions and measures to reduce or limit discharges, air emissions	Risk from environmental exposure is driven by freshwater Prevent discharge of undissolved substance to or recover from onsite wastewater
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Control measures to prevent releases

Air	Treat air emission to provide a typical removal efficiency of 90%
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Water	If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of 0% Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of 0% Not applicable as there is no release to wastewater
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Conditions and measures related to external recovery of waste

Method	External recovery and recycling of waste should comply with applicable local and/or national regulations
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Conditions and measures related to external treatment of waste for disposal

Disposal	External treatment and disposal of waste should comply with applicable local and/or national regulations
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Control of worker exposure	
Title	General measures applicable to all activities
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	H304 - May be fatal if swallowed and enters airways Do NOT induce vomiting
Organisational measures to prevent /limit releases, dispersion and exposure	Do not ingest. If swallowed then seek immediate medical assistance
Remarks	Assumes a good basic standard of occupational hygiene is implemented

Section 3 - Exposure estimation

Environmental release category(ies) - ERC1 - Manufacture of substances

- ERC2 - Formulation of preparations (mixtures)

- ERC3 - Formulation in materials

- ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles

- ERC5 - Industrial use resulting in inclusion into or onto a matrix

- ERC6a - Industrial use resulting in manufacture of another substance (use of intermediates)

- ERC6b - Industrial use of reactive processing aids

- ERC6c - Industrial use of monomers for manufacture of thermoplastics

- ERC6d - Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers

- ERC7 - Industrial use of substances in closed systems

Specific Environmental Release Category - ESVOC SpERC 1.1b.v1

Predicted No Effect Concentration (PNEC)

Calculation method	The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model
Msafe	70000 kg/d
Remarks	Qualitative approach used to conclude safe use

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	12.5 mg/kg bw/d
Worker - inhalative, long-term - systemic	151 mg/m ³
Consumer - oral, long-term - systemic	7.5 mg/kg bw/d
Consumer - dermal, long-term - systemic	7.5 mg/kg bw/d
Consumer - inhalative, long-term - systemic	32 mg/m ³

Remarks Qualitative approach used to conclude safe use

Section 4 - Guidance to check compliance with the exposure scenario

Further details on scaling and control technologies are provided in SpERC factsheet. Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Air. Risk characterisation ratio (RCR). ≤ 0.0000037 .

Waste. Water. Risk characterisation ratio (RCR). ≤ 0.00071 .

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Available hazard data does not support the need for a DNEL to be established for other health effects.

Risk management measures are based on qualitative risk characterization.

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Chemical name Hydrocarbons, C10-C13, aromatics, <1% naphthalene
Pure substance/mixture Substance
REACH registration number 01-2119451097-39-XXXX
EC No (EU Index No) 922-153-0
Supplier Univar Solutions UK Ltd
 Aquarius House
 6 Mid Point Business Park
 Bradford
 GBR

Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

E-mail address SDS.EMEA@univarsolutions.com

Section 1 - Title

Title Use as an intermediate
Type Worker
Main user group Industrial uses: Uses of substances as such or in preparations at industrial sites
Environmental release category(ies) ERC6a - Industrial use resulting in manufacture of another substance (use of intermediates)
Specific Environmental Release Category ESVOC SpERC 6.1a.v1
Process category(ies) PROC1 - Use in closed process, no likelihood of exposure
 PROC2 - Use in closed, continuous process with occasional controlled exposure
 PROC3 - Use in closed batch process (synthesis or formulation)
 PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises
 PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
 PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
 PROC15 - Use as laboratory reagent

Sector(s) of use SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites SU8
 - Manufacture of bulk, large scale chemicals (including petroleum products) SU9 -
 Manufacture of fine chemicals

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Environmental release category(ies) - ERC6a - Industrial use resulting in manufacture of another substance (use of intermediates)

Specific Environmental Release Category - ESVOC SpERC 6.1a.v1

Amounts used

Type	Annual site tonnage
Value	50
Units	t(ons)/year
Type	Fraction of EU tonnage used in region
Value	0.1
Type	Fraction of regional tonnage used locally
Value	1

Type	Maximum daily site tonnage
Value	2500
Units	kg/d

Type	Regional use tonnage
Value	50
Units	t(ons)/year

Product characteristics

Remarks	Substance is complex UVCB
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Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	20
Release fraction to air from process (initial release prior to RMM)	0.0001
Release fraction to wastewater from process (initial release prior to RMM)	0.0003
Release fraction to soil from process (initial release prior to RMM)	0.001
Remarks	Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to municipal sewage treatment plant

Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	91.6%
Removal efficiency (total)	91.6%
Sludge treatment	Do not apply industrial sludge to natural soils Sludge should be incinerated, contained or reclaimed
Remarks	If discharging to domestic sewage treatment plant, no onsite wastewater treatment required

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Risk management measures

Technical onsite conditions and measures to reduce or limit discharges, air emissions	Risk from environmental exposure is driven by freshwater sediment Prevent discharge of undissolved substance to or recover from onsite wastewater
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Control measures to prevent releases

Air	Treat air emission to provide a typical removal efficiency of 80%
Water	If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of 0% Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of ≥ 20.8 Not applicable as there is no release to wastewater

Conditions and measures related to external treatment of waste for disposal

Disposal	This substance is consumed during use and no waste of the substance is generated
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Control of worker exposure

Title	General measures applicable to all activities
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to	H304 - May be fatal if swallowed and enters airways

control dispersion from source towards the worker	Do NOT induce vomiting
Organisational measures to prevent /limit releases, dispersion and exposure	Do not ingest. If swallowed then seek immediate medical assistance
Remarks	Assumes a good basic standard of occupational hygiene is implemented

Title	General exposures (closed systems)
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Remarks	Assumes a good basic standard of occupational hygiene is implemented

Section 3 - Exposure estimation

Environmental release category(ies) - ERC6a - Industrial use resulting in manufacture of another substance (use of intermediates)

Specific Environmental Release Category - ESVOC SpERC 6.1a.v1

Predicted No Effect Concentration (PNEC)

Calculation method The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model
Msafe 24000 kg/d
Remarks Qualitative approach used to conclude safe use

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	12.5 mg/kg bw/d
Worker - inhalative, long-term - systemic	151 mg/m ³
Consumer - oral, long-term - systemic	7.5 mg/kg bw/d
Consumer - dermal, long-term - systemic	7.5 mg/kg bw/d
Consumer - inhalative, long-term - systemic	32 mg/m ³

Remarks Qualitative approach used to conclude safe use

Section 4 - Guidance to check compliance with the exposure scenario

Further details on scaling and control technologies are provided in SpERC factsheet. Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Air. Risk characterisation ratio (RCR). <= 0.0000038.

Waste. Water. Risk characterisation ratio (RCR). <= 0.11.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Available hazard data does not support the need for a DNEL to be established for other health effects.

Risk management measures are based on qualitative risk characterization.

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Chemical name Hydrocarbons, C10-C13, aromatics, <1% naphthalene
Pure substance/mixture Substance
REACH registration number 01-2119451097-39-XXXX
EC No (EU Index No) 922-153-0
Supplier Univar Solutions UK Ltd
 Aquarius House
 6 Mid Point Business Park
 Bradford
 GBR

Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

E-mail address SDS.EMEA@univarsolutions.com

Section 1 - Title

Title Formulation & (re)packing of substances and mixtures
Type Worker
Main user group Industrial uses: Uses of substances as such or in preparations at industrial sites
Environmental release category(ies) ERC2 - Formulation of preparations (mixtures)
Specific Environmental Release Category ESVOC SpERC 2.2.v1
Process category(ies) PROC1 - Use in closed process, no likelihood of exposure
 PROC2 - Use in closed, continuous process with occasional controlled exposure
 PROC3 - Use in closed batch process (synthesis or formulation)
 PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises
 PROC5 - Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact)
 PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
 PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
 PROC9 - Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
 PROC14 - Production of preparations or articles by tableting, compression, extrusion, pelettising
 PROC15 - Use as laboratory reagent

Sector(s) of use SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites SU8 - Manufacture of bulk, large scale chemicals (including petroleum products) SU9 - Manufacture of fine chemicals SU10 - Formulation [mixing] of preparations and/or re-packaging (excluding alloys)

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Environmental release category(ies) - ERC2 - Formulation of preparations (mixtures)
Specific Environmental Release Category - ESVOC SpERC 2.2.v1

Amounts used

Type	Annual site tonnage
Value	287
Units	t(ons)/year

Type	Fraction of EU tonnage used in region
Value	0.1

Type	Fraction of regional tonnage used locally
Value	1

Type	Maximum daily site tonnage
Value	960
Units	kg/d

Type	Regional use tonnage
Value	29
Units	t(ons)/year

Product characteristics

Remarks	Substance is complex UVCB
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Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	300
Release fraction to wastewater from process (initial release prior to RMM)	0.0002
Release fraction to soil from process (initial release prior to RMM)	0.0001
Release fraction to air from process (after typical onsite RMMs consistent with EU Solvent Emissions Directive requirements)	0.005
Remarks	Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to municipal sewage treatment plant

Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	91.6%
Removal efficiency (total)	91.6%
Sludge treatment	Do not apply industrial sludge to natural soils Sludge should be incinerated, contained or reclaimed
Remarks	If discharging to domestic sewage treatment plant, no onsite wastewater treatment required

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Risk management measures

Technical onsite conditions and measures to reduce or limit discharges, air emissions	Risk from environmental exposure is driven by freshwater sediment Prevent discharge of undissolved substance to or recover from onsite wastewater
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Control measures to prevent releases

Air	Treat air emission to provide a typical removal efficiency of 0%
Water	If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of 0% Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of 0% Not applicable as there is no release to wastewater

Conditions and measures related to external recovery of waste

Method	External recovery and recycling of waste should comply with applicable local and/or national regulations
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Conditions and measures related to external treatment of waste for disposal

Disposal	External treatment and disposal of waste should comply with applicable local and/or national regulations
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Control of worker exposure	
Title	General measures applicable to all activities
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	H304 - May be fatal if swallowed and enters airways Do NOT induce vomiting
Organisational measures to prevent /limit releases, dispersion and exposure	Do not ingest. If swallowed then seek immediate medical assistance
Remarks	Assumes a good basic standard of occupational hygiene is implemented

Section 3 - Exposure estimation

Environmental release category(ies) - ERC2 - Formulation of preparations (mixtures)

Specific Environmental Release Category - ESVOC SpERC 2.2.v1

Predicted No Effect Concentration (PNEC)

Calculation method	The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model
Msafe	40700 kg/d
Remarks	Qualitative approach used to conclude safe use

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	12.5 mg/kg bw/d
Worker - inhalative, long-term - systemic	151 mg/m ³
Consumer - oral, long-term - systemic	7.5 mg/kg bw/d
Consumer - dermal, long-term - systemic	7.5 mg/kg bw/d
Consumer - inhalative, long-term - systemic	32 mg/m ³

Remarks	Qualitative approach used to conclude safe use
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Section 4 - Guidance to check compliance with the exposure scenario

Further details on scaling and control technologies are provided in SpERC factsheet. Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Air. Risk characterisation ratio (RCR). <= 0.0000062.

Waste. Water. Risk characterisation ratio (RCR). <= 0.0236.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Available hazard data does not support the need for a DNEL to be established for other health effects.

Risk management measures are based on qualitative risk characterization.

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Chemical name	Hydrocarbons, C10-C13, aromatics, <1% naphthalene
Pure substance/mixture	Substance
REACH registration number	01-2119451097-39-XXXX
EC No (EU Index No)	922-153-0
Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford GBR
Non-Emergency Telephone Number	+44 1274 267300 / +44 1274 267306
E-mail address	SDS.EMEA@univarsolutions.com

Section 1 - Title

Title	Coatings
Type	Worker
Main user group	Industrial uses: Uses of substances as such or in preparations at industrial sites
Environmental release category(ies)	ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles
Specific Environmental Release Category	ESVOC SpERC 4.3a.v1
Process category(ies)	PROC1 - Use in closed process, no likelihood of exposure PROC2 - Use in closed, continuous process with occasional controlled exposure PROC3 - Use in closed batch process (synthesis or formulation) PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises PROC5 - Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact) PROC7 - Industrial spraying PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC9 - Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC10 - Roller application or brushing PROC13 - Treatment of articles by dipping and pouring PROC14 - Production of preparations or articles by tableting, compression, extrusion, pelettising PROC15 - Use as laboratory reagent
Sector(s) of use	SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Environmental release category(ies) - ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles

Specific Environmental Release Category - ESVOC SpERC 4.3a.v1

Amounts used

Type	Annual site tonnage
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Value	12
Units	t(ons)/year

Type	Fraction of EU tonnage used in region
Value	0.1

Type	Fraction of regional tonnage used locally
Value	1

Type	Maximum daily site tonnage
Value	620
Units	kg/d

Type	Regional use tonnage
Value	12
Units	t(ons)/year

Product characteristics

Remarks	Substance is complex UVCB
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Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	20
Release fraction to air from process (initial release prior to RMM)	0.98
Release fraction to wastewater from process (initial release prior to RMM)	0.0007
Release fraction to soil from process (initial release prior to RMM)	0
Remarks	Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to municipal sewage treatment plant

Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	91.6%
Removal efficiency (total)	91.6%
Sludge treatment	Do not apply industrial sludge to natural soils Sludge should be incinerated, contained or reclaimed
Remarks	If discharging to domestic sewage treatment plant, no onsite wastewater treatment required

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Risk management measures

Technical onsite conditions and measures to reduce or limit discharges, air emissions	Risk from environmental exposure is driven by freshwater sediment Prevent discharge of undissolved substance to or recover from onsite wastewater
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Control measures to prevent releases

Air	Treat air emission to provide a typical removal efficiency of 90%
Water	If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of 0% Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of 0% Not applicable as there is no release to wastewater

Conditions and measures related to external recovery of waste

Method	External recovery and recycling of waste should comply with applicable local and/or national
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	regulations
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Conditions and measures related to external treatment of waste for disposal

Disposal	External treatment and disposal of waste should comply with applicable local and/or national regulations
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Control of worker exposure	
Title	General measures applicable to all activities
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	H304 - May be fatal if swallowed and enters airways Do NOT induce vomiting
Organisational measures to prevent /limit releases, dispersion and exposure	Do not ingest. If swallowed then seek immediate medical assistance
Remarks	Assumes a good basic standard of occupational hygiene is implemented

Section 3 - Exposure estimation

Environmental release category(ies) - ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles

Specific Environmental Release Category - ESVOC SpERC 4.3a.v1

Predicted No Effect Concentration (PNEC)

Calculation method	The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model
Msafe	10000 kg/d
Remarks	Qualitative approach used to conclude safe use

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	12.5 mg/kg bw/d
Worker - inhalative, long-term - systemic	151 mg/m ³
Consumer - oral, long-term - systemic	7.5 mg/kg bw/d
Consumer - dermal, long-term - systemic	7.5 mg/kg bw/d
Consumer - inhalative, long-term - systemic	32 mg/m ³

Remarks	Qualitative approach used to conclude safe use
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Section 4 - Guidance to check compliance with the exposure scenario

Further details on scaling and control technologies are provided in SpERC factsheet. Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Air. Risk characterisation ratio (RCR). <= 0.000021.

Waste. Water. Risk characterisation ratio (RCR). <= 0.061.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Available hazard data does not support the need for a DNEL to be established for other health effects.

Risk management measures are based on qualitative risk characterization.

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Chemical name Hydrocarbons, C10-C13, aromatics, <1% naphthalene
Pure substance/mixture Substance
REACH registration number 01-2119451097-39-XXXX
EC No (EU Index No) 922-153-0
Supplier Univar Solutions UK Ltd
 Aquarius House
 6 Mid Point Business Park
 Bradford
 GBR

Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

E-mail address SDS.EMEA@univarsolutions.com

Section 1 - Title

Title Cleaning agent
Type Worker
Main user group Industrial uses: Uses of substances as such or in preparations at industrial sites
Environmental release category(ies) ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles
Specific Environmental Release Category ESVOC SpERC 4.4a.v1
Process category(ies) PROC1 - Use in closed process, no likelihood of exposure
 PROC2 - Use in closed, continuous process with occasional controlled exposure
 PROC3 - Use in closed batch process (synthesis or formulation)
 PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises
 PROC7 - Industrial spraying
 PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
 PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
 PROC10 - Roller application or brushing
 PROC13 - Treatment of articles by dipping and pouring
Sector(s) of use SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Environmental release category(ies) - ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles

Specific Environmental Release Category - ESVOC SpERC 4.4a.v1

Amounts used

Type	Annual site tonnage
Value	100
Units	t(ons)/year

Type	Fraction of EU tonnage used in region
Value	0.1

Type	Fraction of regional tonnage used locally
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Value	1
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Type	Maximum daily site tonnage
Value	5000
Units	kg/d

Type	Regional use tonnage
Value	1300
Units	t(ons)/year

Product characteristics

Remarks	Substance is complex UVCB
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Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	20
Release fraction to air from process (initial release prior to RMM)	1
Release fraction to wastewater from process (initial release prior to RMM)	0.000003
Release fraction to soil from process (initial release prior to RMM)	0
Remarks	Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to municipal sewage treatment plant

Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	91.6%
Removal efficiency (total)	91.6%
Sludge treatment	Do not apply industrial sludge to natural soils Sludge should be incinerated, contained or reclaimed
Remarks	If discharging to domestic sewage treatment plant, no onsite wastewater treatment required

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Risk management measures

Technical onsite conditions and measures to reduce or limit discharges, air emissions	Risk from environmental exposure is driven by freshwater sediment Prevent discharge of undissolved substance to or recover from onsite wastewater
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Control measures to prevent releases

Air	Treat air emission to provide a typical removal efficiency of 70%
Water	If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of 0% Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of 0% Not applicable as there is no release to wastewater

Conditions and measures related to external recovery of waste

Method	External recovery and recycling of waste should comply with applicable local and/or national regulations
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Conditions and measures related to external treatment of waste for disposal

Disposal	External treatment and disposal of waste should comply with applicable local and/or national regulations
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Control of worker exposure	
Title	General measures applicable to all activities
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	H304 - May be fatal if swallowed and enters airways Do NOT induce vomiting
Organisational measures to prevent /limit releases, dispersion and exposure	Do not ingest. If swallowed then seek immediate medical assistance
Remarks	Assumes a good basic standard of occupational hygiene is implemented

Section 3 - Exposure estimation

Environmental release category(ies) - ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles

Specific Environmental Release Category - ESVOC SpERC 4.4a.v1

Predicted No Effect Concentration (PNEC)

Calculation method The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model
Msafe 2300000 kg/d
Remarks Qualitative approach used to conclude safe use

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	12.5 mg/kg bw/d
Worker - inhalative, long-term - systemic	151 mg/m ³
Consumer - oral, long-term - systemic	7.5 mg/kg bw/d
Consumer - dermal, long-term - systemic	7.5 mg/kg bw/d
Consumer - inhalative, long-term - systemic	32 mg/m ³

Remarks Qualitative approach used to conclude safe use

Section 4 - Guidance to check compliance with the exposure scenario

Further details on scaling and control technologies are provided in SpERC factsheet. Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Air. Risk characterisation ratio (RCR). <= 0.00052.

Waste. Water. Risk characterisation ratio (RCR). <= 0.0021.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Available hazard data does not support the need for a DNEL to be established for other health effects.

Risk management measures are based on qualitative risk characterization.

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Chemical name Hydrocarbons, C10-C13, aromatics, <1% naphthalene
Pure substance/mixture Substance
REACH registration number 01-2119451097-39-XXXX
EC No (EU Index No) 922-153-0
Supplier Univar Solutions UK Ltd
 Aquarius House
 6 Mid Point Business Park
 Bradford
 GBR

Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

E-mail address SDS.EMEA@univarsolutions.com

Section 1 - Title

Title Lubricants
Type Worker
Main user group Industrial uses: Uses of substances as such or in preparations at industrial sites
Environmental release category(ies) ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles
 ERC7 - Industrial use of substances in closed systems
Specific Environmental Release Category ESVOC SpERC 4.6a.v1
Process category(ies) PROC1 - Use in closed process, no likelihood of exposure
 PROC2 - Use in closed, continuous process with occasional controlled exposure
 PROC3 - Use in closed batch process (synthesis or formulation)
 PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises
 PROC7 - Industrial spraying
 PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
 PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
 PROC9 - Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
 PROC10 - Roller application or brushing
 PROC13 - Treatment of articles by dipping and pouring
 PROC17 - Lubrication at high energy conditions and in partly open process
 PROC18 - Greasing at high energy conditions
Sector(s) of use SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Environmental release category(ies) - ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles
 - ERC7 - Industrial use of substances in closed systems
Specific Environmental Release Category - ESVOC SpERC 4.6a.v1

Amounts used

Type	Annual site tonnage
Value	3.8
Units	t(ons)/year

Type	Fraction of EU tonnage used in region
Value	0.1

Type	Fraction of regional tonnage used locally
Value	1

Type	Maximum daily site tonnage
Value	190
Units	kg/d

Type	Regional use tonnage
Value	3.8
Units	t(ons)/year

Product characteristics

Remarks	Substance is complex UVCB
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Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	20
Release fraction to air from process (initial release prior to RMM)	0.001
Release fraction to wastewater from process (initial release prior to RMM)	0.00003
Release fraction to soil from process (initial release prior to RMM)	0.001
Remarks	Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to municipal sewage treatment plant

Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	91.6%
Removal efficiency (total)	91.6%
Sludge treatment	Do not apply industrial sludge to natural soils Sludge should be incinerated, contained or reclaimed
Remarks	If discharging to domestic sewage treatment plant, no onsite wastewater treatment required

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Risk management measures

Technical onsite conditions and measures to reduce or limit discharges, air emissions	Risk from environmental exposure is driven by freshwater sediment Prevent discharge of undissolved substance to or recover from onsite wastewater
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Control measures to prevent releases

Air	Treat air emission to provide a typical removal efficiency of 70%
Water	If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of 0% Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of 0% Not applicable as there is no release to wastewater

Conditions and measures related to external recovery of waste

Method	External recovery and recycling of waste should comply with applicable local and/or national regulations
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Conditions and measures related to external treatment of waste for disposal

Disposal	External treatment and disposal of waste should comply with applicable local and/or national regulations
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Control of worker exposure	
Title	General measures applicable to all activities
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	H304 - May be fatal if swallowed and enters airways Do NOT induce vomiting
Organisational measures to prevent /limit releases, dispersion and exposure	Do not ingest. If swallowed then seek immediate medical assistance
Remarks	Assumes a good basic standard of occupational hygiene is implemented

Section 3 - Exposure estimation

Environmental release category(ies) - ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles

- ERC7 - Industrial use of substances in closed systems

Specific Environmental Release Category - ESVOC SpERC 4.6a.v1

Predicted No Effect Concentration (PNEC)

Calculation method	The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model
Msafe	240000 kg/d
Remarks	Qualitative approach used to conclude safe use

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	12.5 mg/kg bw/d
Worker - inhalative, long-term - systemic	151 mg/m ³
Consumer - oral, long-term - systemic	7.5 mg/kg bw/d
Consumer - dermal, long-term - systemic	7.5 mg/kg bw/d
Consumer - inhalative, long-term - systemic	32 mg/m ³

Remarks	Qualitative approach used to conclude safe use
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Section 4 - Guidance to check compliance with the exposure scenario

Further details on scaling and control technologies are provided in SpERC factsheet. Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Air. Risk characterisation ratio (RCR). <= 0.0000037.

Waste. Water. Risk characterisation ratio (RCR). <= 0.0008.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Available hazard data does not support the need for a DNEL to be established for other health effects.

Risk management measures are based on qualitative risk characterization.

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Chemical name Hydrocarbons, C10-C13, aromatics, <1% naphthalene
Pure substance/mixture Substance
REACH registration number 01-2119451097-39-XXXX
EC No (EU Index No) 922-153-0
Supplier Univar Solutions UK Ltd
 Aquarius House
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Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

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Section 1 - Title

Title Binder and Release agents
Type Worker
Main user group Industrial uses: Uses of substances as such or in preparations at industrial sites
Environmental release category(ies) ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles
Specific Environmental Release Category ESVOC SpERC 4.10a.v1
Process category(ies) PROC1 - Use in closed process, no likelihood of exposure
 PROC2 - Use in closed, continuous process with occasional controlled exposure
 PROC3 - Use in closed batch process (synthesis or formulation)
 PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises
 PROC6 - Calendaring operations
 PROC7 - Industrial spraying
 PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
 PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
 PROC10 - Roller application or brushing
 PROC13 - Treatment of articles by dipping and pouring
 PROC14 - Production of preparations or articles by tableting, compression, extrusion, pelettising

Sector(s) of use SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Environmental release category(ies) - ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles

Specific Environmental Release Category - ESVOC SpERC 4.10a.v1

Amounts used

Type	Annual site tonnage
Value	63
Units	t(ons)/year

Type	Fraction of EU tonnage used in region
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Value	0.1
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Type	Fraction of regional tonnage used locally
Value	1

Type	Maximum daily site tonnage
Value	3200
Units	kg/d

Type	Regional use tonnage
Value	63
Units	t(ons)/year

Product characteristics

Remarks	Substance is complex UVCB
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Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	20
Release fraction to air from process (initial release prior to RMM)	1
Release fraction to wastewater from process (initial release prior to RMM)	0.000003
Release fraction to soil from process (initial release prior to RMM)	0
Remarks	Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to municipal sewage treatment plant

Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	91.6%
Removal efficiency (total)	91.6%
Sludge treatment	Do not apply industrial sludge to natural soils Sludge should be incinerated, contained or reclaimed

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Risk management measures

Technical onsite conditions and measures to reduce or limit discharges, air emissions	Risk from environmental exposure is driven by freshwater sediment Prevent discharge of undissolved substance to or recover from onsite wastewater
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Control measures to prevent releases

Air	Treat air emission to provide a typical removal efficiency of 80%
Water	If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of 0% Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of 0% Not applicable as there is no release to wastewater

Conditions and measures related to external recovery of waste

Method	External recovery and recycling of waste should comply with applicable local and/or national regulations
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Conditions and measures related to external treatment of waste for disposal

Disposal	External treatment and disposal of waste should comply with applicable local and/or
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	national regulations
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Control of worker exposure	
Title	General measures applicable to all activities
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	H304 - May be fatal if swallowed and enters airways Do NOT induce vomiting
Organisational measures to prevent /limit releases, dispersion and exposure	Do not ingest. If swallowed then seek immediate medical assistance
Remarks	Assumes a good basic standard of occupational hygiene is implemented

Section 3 - Exposure estimation

Environmental release category(ies) - ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles

Specific Environmental Release Category - ESVOC SpERC 4.10a.v1

Predicted No Effect Concentration (PNEC)

Calculation method The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model
Msafe 2400000 kg/d
Remarks Qualitative approach used to conclude safe use

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	12.5 mg/kg bw/d
Worker - inhalative, long-term - systemic	151 mg/m ³
Consumer - oral, long-term - systemic	7.5 mg/kg bw/d
Consumer - dermal, long-term - systemic	7.5 mg/kg bw/d
Consumer - inhalative, long-term - systemic	32 mg/m ³

Remarks Qualitative approach used to conclude safe use

Section 4 - Guidance to check compliance with the exposure scenario

Further details on scaling and control technologies are provided in SpERC factsheet. Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Air. Risk characterisation ratio (RCR). <= 0.00022.

Waste. Water. Risk characterisation ratio (RCR). <= 0.0013.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Available hazard data does not support the need for a DNEL to be established for other health effects.

Risk management measures are based on qualitative risk characterization.

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Chemical name Hydrocarbons, C10-C13, aromatics, <1% naphthalene
Pure substance/mixture Substance
REACH registration number 01-2119451097-39-XXXX
EC No (EU Index No) 922-153-0
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Section 1 - Title

Title Fuels
Type Worker
Main user group Industrial uses: Uses of substances as such or in preparations at industrial sites
Environmental release category(ies) ERC7 - Industrial use of substances in closed systems
Specific Environmental Release Category ESVOC SpERC 7.12a.v1
Process category(ies) PROC1 - Use in closed process, no likelihood of exposure
 PROC2 - Use in closed, continuous process with occasional controlled exposure
 PROC3 - Use in closed batch process (synthesis or formulation)
 PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
 PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
 PROC16 - Using material as fuel sources, limited exposure to unburned product to be expected

Sector(s) of use SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Environmental release category(ies) - ERC7 - Industrial use of substances in closed systems
Specific Environmental Release Category - ESVOC SpERC 7.12a.v1

Amounts used

Type	Annual site tonnage
Value	5
Units	t(ons)/year

Type	Fraction of EU tonnage used in region
Value	0.1

Type	Fraction of regional tonnage used locally
Value	1

Type	Maximum daily site tonnage
Value	250

Units	kg/d
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Type	Regional use tonnage
Value	5
Units	t(ons)/year

Product characteristics

Remarks	Substance is complex UVCB
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Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	20
Release fraction to air from process (initial release prior to RMM)	0.005
Release fraction to wastewater from process (initial release prior to RMM)	0.00001
Release fraction to soil from process (initial release prior to RMM)	0
Remarks	Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to municipal sewage treatment plant

Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	91.6%
Removal efficiency (total)	91.6%
Sludge treatment	Do not apply industrial sludge to natural soils Sludge should be incinerated, contained or reclaimed

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Risk management measures

Technical onsite conditions and measures to reduce or limit discharges, air emissions	Risk from environmental exposure is driven by freshwater Prevent discharge of undissolved substance to or recover from onsite wastewater
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Control measures to prevent releases

Air	Treat air emission to provide a typical removal efficiency of 95%
Water	If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of 0% Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of 0% Not applicable as there is no release to wastewater

Conditions and measures related to external recovery of waste

Method	External recovery and recycling of waste should comply with applicable local and/or national regulations
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Conditions and measures related to external treatment of waste for disposal

Disposal	External treatment and disposal of waste should comply with applicable local and/or national regulations
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Control of worker exposure

Title	General measures applicable to all activities
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).

Technical conditions and measures to control dispersion from source towards the worker	H304 - May be fatal if swallowed and enters airways Do NOT induce vomiting
Organisational measures to prevent /limit releases, dispersion and exposure	Do not ingest. If swallowed then seek immediate medical assistance
Remarks	Assumes a good basic standard of occupational hygiene is implemented

Section 3 - Exposure estimation

Environmental release category(ies) - ERC7 - Industrial use of substances in closed systems
Specific Environmental Release Category - ESVOC SpERC 7.12a.v1

Predicted No Effect Concentration (PNEC)

Calculation method The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model
Msafe 260000 kg/d
Remarks Qualitative approach used to conclude safe use

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	12.5 mg/kg bw/d
Worker - inhalative, long-term - systemic	151 mg/m ³
Consumer - oral, long-term - systemic	7.5 mg/kg bw/d
Consumer - dermal, long-term - systemic	7.5 mg/kg bw/d
Consumer - inhalative, long-term - systemic	32 mg/m ³

Remarks Qualitative approach used to conclude safe use

Section 4 - Guidance to check compliance with the exposure scenario

Further details on scaling and control technologies are provided in SpERC factsheet. Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Air. Risk characterisation ratio (RCR). <= 0.0000037.

Waste. Water. Risk characterisation ratio (RCR). <= 0.00096.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Available hazard data does not support the need for a DNEL to be established for other health effects.

Risk management measures are based on qualitative risk characterization.

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Chemical name Hydrocarbons, C10-C13, aromatics, <1% naphthalene
Pure substance/mixture Substance
REACH registration number 01-2119451097-39-XXXX
EC No (EU Index No) 922-153-0
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Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

E-mail address SDS.EMEA@univarsolutions.com

Section 1 - Title

Title Functional fluids
Type Worker
Main user group Industrial uses: Uses of substances as such or in preparations at industrial sites
Environmental release category(ies) ERC7 - Industrial use of substances in closed systems
Specific Environmental Release Category ESVOC SpERC 7.13a.v1
Process category(ies) PROC1 - Use in closed process, no likelihood of exposure
 PROC2 - Use in closed, continuous process with occasional controlled exposure
 PROC3 - Use in closed batch process (synthesis or formulation)
 PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises
 PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
 PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
 PROC9 - Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
Sector(s) of use SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Environmental release category(ies) - ERC7 - Industrial use of substances in closed systems
Specific Environmental Release Category - ESVOC SpERC 7.13a.v1

Amounts used

Type	Annual site tonnage
Value	10
Units	t(ons)/year

Type	Fraction of EU tonnage used in region
Value	0.1

Type	Fraction of regional tonnage used locally
Value	1

Type	Maximum daily site tonnage
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Value	500
Units	kg/d

Type	Regional use tonnage
Value	100
Units	t(ons)/year

Product characteristics

Remarks	Substance is complex UVCB
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Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	20
Release fraction to air from process (initial release prior to RMM)	0.001
Release fraction to wastewater from process (initial release prior to RMM)	0.00003
Release fraction to soil from process (initial release prior to RMM)	0.001
Remarks	Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to municipal sewage treatment plant

Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	91.6%
Removal efficiency (total)	91.6%
Sludge treatment	Do not apply industrial sludge to natural soils Sludge should be incinerated, contained or reclaimed

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Risk management measures

Technical onsite conditions and measures to reduce or limit discharges, air emissions	Risk from environmental exposure is driven by freshwater Prevent discharge of undissolved substance to or recover from onsite wastewater
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Control measures to prevent releases

Air	Treat air emission to provide a typical removal efficiency of 0%
Water	If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of 0% Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of 0% Not applicable as there is no release to wastewater

Conditions and measures related to external recovery of waste

Method	External recovery and recycling of waste should comply with applicable local and/or national regulations
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Conditions and measures related to external treatment of waste for disposal

Disposal	External treatment and disposal of waste should comply with applicable local and/or national regulations
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Control of worker exposure

Title	General measures applicable to all activities
Covers concentrations up to	100%
Physical form of product	Liquid

Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	H304 - May be fatal if swallowed and enters airways Do NOT induce vomiting
Organisational measures to prevent /limit releases, dispersion and exposure	Do not ingest. If swallowed then seek immediate medical assistance
Remarks	Assumes a good basic standard of occupational hygiene is implemented

Section 3 - Exposure estimation

Environmental release category(ies) - ERC7 - Industrial use of substances in closed systems

Specific Environmental Release Category - ESVOC SpERC 7.13a.v1

Predicted No Effect Concentration (PNEC)

Calculation method The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model
Msafe 240000 kg/d
Remarks Qualitative approach used to conclude safe use

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	12.5 mg/kg bw/d
Worker - inhalative, long-term - systemic	151 mg/m ³
Consumer - oral, long-term - systemic	7.5 mg/kg bw/d
Consumer - dermal, long-term - systemic	7.5 mg/kg bw/d
Consumer - inhalative, long-term - systemic	32 mg/m ³

Remarks Qualitative approach used to conclude safe use

Section 4 - Guidance to check compliance with the exposure scenario

Further details on scaling and control technologies are provided in SpERC factsheet. Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Air. Risk characterisation ratio (RCR). <= 0.0000038.

Waste. Water. Risk characterisation ratio (RCR). <= 0.0021.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Available hazard data does not support the need for a DNEL to be established for other health effects.

Risk management measures are based on qualitative risk characterization.

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Chemical name Hydrocarbons, C10-C13, aromatics, <1% naphthalene
Pure substance/mixture Substance
REACH registration number 01-2119451097-39-XXXX
EC No (EU Index No) 922-153-0
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Section 1 - Title

Title Use in laboratories
Type Worker
Main user group Industrial uses: Uses of substances as such or in preparations at industrial sites
Environmental release category(ies) ERC2 - Formulation of preparations (mixtures) ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles
Process category(ies) PROC10 - Roller application or brushing
 PROC15 - Use as laboratory reagent
Sector(s) of use SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Environmental release category(ies) - ERC2 - Formulation of preparations (mixtures)
 - ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles

Amounts used

Type	Annual site tonnage
Value	0.1
Units	t(ons)/year

Type	Fraction of EU tonnage used in region
Value	0.1

Type	Fraction of regional tonnage used locally
Value	1

Type	Maximum daily site tonnage
Value	5
Units	kg/d

Type	Regional use tonnage
Value	0.1
Units	t(ons)/year

Product characteristics

Remarks	Substance is complex UVCB
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Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	20
Release fraction to air from process (initial release prior to RMM)	0.025
Release fraction to wastewater from process (initial release prior to RMM)	0.02
Release fraction to soil from process (initial release prior to RMM)	0.0001
Remarks	Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to municipal sewage treatment plant

Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	91.6%
Removal efficiency (total)	91.6%
Sludge treatment	Do not apply industrial sludge to natural soils Sludge should be incinerated, contained or reclaimed

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Risk management measures

Technical onsite conditions and measures to reduce or limit discharges, air emissions	Risk from environmental exposure is driven by freshwater sediment Prevent discharge of undissolved substance to or recover from onsite wastewater
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Control measures to prevent releases

Air	Treat air emission to provide a typical removal efficiency of 0%
Water	If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of 0% Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of 0% Not applicable as there is no release to wastewater

Conditions and measures related to external recovery of waste

Method	External recovery and recycling of waste should comply with applicable local and/or national regulations
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Conditions and measures related to external treatment of waste for disposal

Disposal	External treatment and disposal of waste should comply with applicable local and/or national regulations
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Control of worker exposure

Title	General measures applicable to all activities
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	H304 - May be fatal if swallowed and enters airways Do NOT induce vomiting
Organisational measures to prevent /limit releases, dispersion and exposure	Do not ingest. If swallowed then seek immediate medical assistance
Remarks	Assumes a good basic standard of occupational hygiene is implemented

Section 3 - Exposure estimation

Environmental release category(ies) - ERC2 - Formulation of preparations (mixtures)
- ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles

**Predicted No Effect Concentration
(PNEC)**

Calculation method	The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model
Msafe	350 kg/d
Remarks	Qualitative approach used to conclude safe use

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	12.5 mg/kg bw/d
Worker - inhalative, long-term - systemic	151 mg/m ³
Consumer - oral, long-term - systemic	7.5 mg/kg bw/d
Consumer - dermal, long-term - systemic	7.5 mg/kg bw/d
Consumer - inhalative, long-term - systemic	32 mg/m ³

Remarks	Qualitative approach used to conclude safe use
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Section 4 - Guidance to check compliance with the exposure scenario

Further details on scaling and control technologies are provided in SpERC factsheet. Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Air. Risk characterisation ratio (RCR). <= 0.0000037.

Waste. Water. Risk characterisation ratio (RCR). <= 0.014.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Available hazard data does not support the need for a DNEL to be established for other health effects.

Risk management measures are based on qualitative risk characterization.

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Chemical name Hydrocarbons, C10-C13, aromatics, <1% naphthalene
Pure substance/mixture Substance
REACH registration number 01-2119451097-39-XXXX
EC No (EU Index No) 922-153-0
Supplier Univar Solutions UK Ltd
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Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

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Section 1 - Title

Title Use in polymer processing.
Type Worker
Main user group Industrial uses: Uses of substances as such or in preparations at industrial sites
Environmental release category(ies) ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles
Specific Environmental Release Category ESVOC SpERC 4.21a.v1
Process category(ies) PROC1 - Use in closed process, no likelihood of exposure
 PROC2 - Use in closed, continuous process with occasional controlled exposure
 PROC3 - Use in closed batch process (synthesis or formulation)
 PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises
 PROC5 - Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact)
 PROC6 - Calendaring operations
 PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
 PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
 PROC9 - Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
 PROC13 - Treatment of articles by dipping and pouring
 PROC14 - Production of preparations or articles by tableting, compression, extrusion, pelettising

Sector(s) of use SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites
 SU10 - Formulation [mixing] of preparations and/or re-packaging (excluding alloys)

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Environmental release category(ies) - ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles
Specific Environmental Release Category - ESVOC SpERC 4.21a.v1

Amounts used

Type	Annual site tonnage
Value	3

Units	t(ons)/year
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Type	Fraction of EU tonnage used in region
Value	0.1

Type	Fraction of regional tonnage used locally
Value	1

Type	Maximum daily site tonnage
Value	150
Units	kg/d

Type	Regional use tonnage
Value	3
Units	t(ons)/year

Product characteristics

Remarks	Substance is complex UVCB
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Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	20
Release fraction to air from process (initial release prior to RMM)	0.01
Release fraction to wastewater from process (initial release prior to RMM)	0
Release fraction to soil from process (initial release prior to RMM)	0.00001
Remarks	Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to municipal sewage treatment plant

Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	91.6%
Removal efficiency (total)	91.6%
Sludge treatment	Do not apply industrial sludge to natural soils Sludge should be incinerated, contained or reclaimed

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Risk management measures

Technical onsite conditions and measures to reduce or limit discharges, air emissions	Risk from environmental exposure is driven by freshwater Prevent discharge of undissolved substance to or recover from onsite wastewater
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Control measures to prevent releases

Air	Treat air emission to provide a typical removal efficiency of 80%
Water	If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of 0% Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of 0% Not applicable as there is no release to wastewater

Conditions and measures related to external recovery of waste

Method	External recovery and recycling of waste should comply with applicable local and/or national regulations
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Conditions and measures related to external treatment of waste for disposal

Disposal	External treatment and disposal of waste should comply with applicable local and/or national regulations
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Control of worker exposure

Title	General measures applicable to all activities
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	H304 - May be fatal if swallowed and enters airways Do NOT induce vomiting
Organisational measures to prevent /limit releases, dispersion and exposure	Do not ingest. If swallowed then seek immediate medical assistance
Remarks	Assumes a good basic standard of occupational hygiene is implemented

Section 3 - Exposure estimation

Environmental release category(ies) - ERC4 - Industrial use of processing aids in processes and products, not becoming part of articles

Specific Environmental Release Category - ESVOC SpERC 4.21a.v1

Predicted No Effect Concentration (PNEC)

Calculation method	The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model
Msafe	230000 kg/d
Remarks	Qualitative approach used to conclude safe use

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	12.5 mg/kg bw/d
Worker - inhalative, long-term - systemic	151 mg/m ³
Consumer - oral, long-term - systemic	7.5 mg/kg bw/d
Consumer - dermal, long-term - systemic	7.5 mg/kg bw/d
Consumer - inhalative, long-term - systemic	32 mg/m ³

Remarks	Qualitative approach used to conclude safe use
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Section 4 - Guidance to check compliance with the exposure scenario

Further details on scaling and control technologies are provided in SpERC factsheet. Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Air. Risk characterisation ratio (RCR). <= 0.0000047.

Waste. Water. Risk characterisation ratio (RCR). <= 0.00065.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Available hazard data does not support the need for a DNEL to be established for other health effects.

Risk management measures are based on qualitative risk characterization.

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Chemical name Hydrocarbons, C10-C13, aromatics, <1% naphthalene
Pure substance/mixture Substance
REACH registration number 01-2119451097-39-XXXX
EC No (EU Index No) 922-153-0
Supplier Univar Solutions UK Ltd
 Aquarius House
 6 Mid Point Business Park
 Bradford
 GBR

Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

E-mail address SDS.EMEA@univarsolutions.com

Section 1 - Title

Title Coatings
Type Worker
Main user group Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Environmental release category(ies) ERC8a - Wide dispersive indoor use of processing aids in open systems ERC8d - Wide dispersive outdoor use of processing aids in open systems
Specific Environmental Release Category ESVOC SpERC 8.3b.v1
Process category(ies) PROC1 - Use in closed process, no likelihood of exposure
 PROC2 - Use in closed, continuous process with occasional controlled exposure
 PROC3 - Use in closed batch process (synthesis or formulation)
 PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises
 PROC5 - Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact)
 PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
 PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
 PROC10 - Roller application or brushing
 PROC11 - Non industrial spraying
 PROC13 - Treatment of articles by dipping and pouring
 PROC15 - Use as laboratory reagent
 PROC19 - Hand-mixing with intimate contact and only PPE available
 SU22 - Professional uses

Sector(s) of use

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Environmental release category(ies) - ERC8a - Wide dispersive indoor use of processing aids in open systems
 - ERC8d - Wide dispersive outdoor use of processing aids in open systems
Specific Environmental Release Category - ESVOC SpERC 8.3b.v1

Amounts used

Type	Annual site tonnage
Value	0.0019
Units	t(ons)/year

Type	Fraction of EU tonnage used in region
Value	0.1

Type	Fraction of regional tonnage used locally
Value	1

Type	Maximum daily site tonnage
Value	0.0052
Units	kg/d

Type	Regional use tonnage
Value	3.8
Units	t(ons)/year

Product characteristics

Remarks	Substance is complex UVCB
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Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	365
Release fraction to air from process (initial release prior to RMM)	0.98
Release fraction to wastewater from process (initial release prior to RMM)	0.01
Release fraction to soil from process (initial release prior to RMM)	0.01
Remarks	Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to municipal sewage treatment plant

Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	91.6%
Removal efficiency (total)	91.6%
Sludge treatment	Do not apply industrial sludge to natural soils Sludge should be incinerated, contained or reclaimed

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Risk management measures

Technical onsite conditions and measures to reduce or limit discharges, air emissions	Risk from environmental exposure is driven by freshwater Prevent discharge of undissolved substance to or recover from onsite wastewater
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Control measures to prevent releases

Water	If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of 0% Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of 0% Not applicable as there is no release to wastewater
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Conditions and measures related to external recovery of waste

Method	External recovery and recycling of waste should comply with applicable local and/or national regulations
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Conditions and measures related to external treatment of waste for disposal

Disposal	External treatment and disposal of waste should comply with applicable local and/or national regulations
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Control of worker exposure	
Title	General measures applicable to all activities
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	H304 - May be fatal if swallowed and enters airways Do NOT induce vomiting
Organisational measures to prevent /limit releases, dispersion and exposure	Do not ingest. If swallowed then seek immediate medical assistance
Remarks	Assumes a good basic standard of occupational hygiene is implemented

Section 3 - Exposure estimation

Environmental release category(ies) - ERC8a - Wide dispersive indoor use of processing aids in open systems
- ERC8d - Wide dispersive outdoor use of processing aids in open systems
Specific Environmental Release Category - ESVOC SpERC 8.3b.v1

Predicted No Effect Concentration (PNEC)

Calculation method The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model
Msafe 7.9 kg/d
Remarks Qualitative approach used to conclude safe use

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	12.5 mg/kg bw/d
Worker - inhalative, long-term - systemic	151 mg/m ³
Consumer - oral, long-term - systemic	7.5 mg/kg bw/d
Consumer - dermal, long-term - systemic	7.5 mg/kg bw/d
Consumer - inhalative, long-term - systemic	32 mg/m ³

Remarks Qualitative approach used to conclude safe use

Section 4 - Guidance to check compliance with the exposure scenario

Further details on scaling and control technologies are provided in SpERC factsheet. Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Air. Risk characterisation ratio (RCR). <= 0.0000099.

Waste. Water. Risk characterisation ratio (RCR). <= 0.00066.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Available hazard data does not support the need for a DNEL to be established for other health effects.

Risk management measures are based on qualitative risk characterization.

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Chemical name Hydrocarbons, C10-C13, aromatics, <1% naphthalene
Pure substance/mixture Substance
REACH registration number 01-2119451097-39-XXXX
EC No (EU Index No) 922-153-0
Supplier Univar Solutions UK Ltd
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 6 Mid Point Business Park
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Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

E-mail address SDS.EMEA@univarsolutions.com

Section 1 - Title

Title Cleaning agent
Type Worker
Main user group Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Environmental release category(ies) ERC8a - Wide dispersive indoor use of processing aids in open systems ERC8d - Wide dispersive outdoor use of processing aids in open systems
Specific Environmental Release Category ESVOC SpERC 8.4b.v1
Process category(ies) PROC1 - Use in closed process, no likelihood of exposure
 PROC2 - Use in closed, continuous process with occasional controlled exposure
 PROC3 - Use in closed batch process (synthesis or formulation)
 PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises
 PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
 PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
 PROC10 - Roller application or brushing
 PROC11 - Non industrial spraying
 PROC13 - Treatment of articles by dipping and pouring
 PROC19 - Hand-mixing with intimate contact and only PPE available

Sector(s) of use SU22 - Professional uses

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Environmental release category(ies) - ERC8a - Wide dispersive indoor use of processing aids in open systems
 - ERC8d - Wide dispersive outdoor use of processing aids in open systems

Specific Environmental Release Category - ESVOC SpERC 8.4b.v1

Amounts used

Type	Annual site tonnage
Value	0.013
Units	t(ons)/year

Type	Fraction of EU tonnage used in region
Value	0.1

Type	Fraction of regional tonnage used locally
Value	1

Type	Maximum daily site tonnage
Value	0.036
Units	kg/d

Type	Regional use tonnage
Value	26
Units	t(ons)/year

Product characteristics

Remarks	Substance is complex UVCB
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Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	365
Release fraction to air from process (initial release prior to RMM)	0.02
Release fraction to wastewater from process (initial release prior to RMM)	0.000001
Release fraction to soil from process (initial release prior to RMM)	0
Remarks	Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to municipal sewage treatment plant

Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	91.6%
Removal efficiency (total)	91.6%
Sludge treatment	Do not apply industrial sludge to natural soils Sludge should be incinerated, contained or reclaimed

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Risk management measures

Technical onsite conditions and measures to reduce or limit discharges, air emissions	Risk from environmental exposure is driven by freshwater Prevent discharge of undissolved substance to or recover from onsite wastewater
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Control measures to prevent releases

Water	If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of 0% Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of 0% Not applicable as there is no release to wastewater
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Conditions and measures related to external recovery of waste

Method	External recovery and recycling of waste should comply with applicable local and/or national regulations
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Conditions and measures related to external treatment of waste for disposal

Disposal	External treatment and disposal of waste should comply with applicable local and/or national regulations
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Control of worker exposure	
Title	General measures applicable to all activities
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	H304 - May be fatal if swallowed and enters airways Do NOT induce vomiting
Organisational measures to prevent /limit releases, dispersion and exposure	Do not ingest. If swallowed then seek immediate medical assistance
Remarks	Assumes a good basic standard of occupational hygiene is implemented

Section 3 - Exposure estimation

**Environmental release category(ies) - ERC8a - Wide dispersive indoor use of processing aids in open systems
- ERC8d - Wide dispersive outdoor use of processing aids in open systems
Specific Environmental Release Category - ESVOC SpERC 8.4b.v1**

Predicted No Effect Concentration (PNEC)

Calculation method The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model
Msafe 22 kg/d
Remarks Qualitative approach used to conclude safe use

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	12.5 mg/kg bw/d
Worker - inhalative, long-term - systemic	151 mg/m ³
Consumer - oral, long-term - systemic	7.5 mg/kg bw/d
Consumer - dermal, long-term - systemic	7.5 mg/kg bw/d
Consumer - inhalative, long-term - systemic	32 mg/m ³

Remarks Qualitative approach used to conclude safe use

Section 4 - Guidance to check compliance with the exposure scenario

Further details on scaling and control technologies are provided in SpERC factsheet. Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Air. Risk characterisation ratio (RCR). <= 0.000003.

Waste. Water. Risk characterisation ratio (RCR). <= 0.00064.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Available hazard data does not support the need for a DNEL to be established for other health effects.

Risk management measures are based on qualitative risk characterization.

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Chemical name Hydrocarbons, C10-C13, aromatics, <1% naphthalene
Pure substance/mixture Substance
REACH registration number 01-2119451097-39-XXXX
EC No (EU Index No) 922-153-0
Supplier Univar Solutions UK Ltd
 Aquarius House
 6 Mid Point Business Park
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Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

E-mail address SDS.EMEA@univarsolutions.com

Section 1 - Title

Title Use in agrochemicals
Type Worker
Main user group Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Environmental release category(ies) ERC8a - Wide dispersive indoor use of processing aids in open systems ERC8d - Wide dispersive outdoor use of processing aids in open systems
Specific Environmental Release Category ESVOC SpERC 8.11a.v1
Process category(ies) PROC1 - Use in closed process, no likelihood of exposure
 PROC2 - Use in closed, continuous process with occasional controlled exposure
 PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises
 PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
 PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
 PROC11 - Non industrial spraying
 PROC13 - Treatment of articles by dipping and pouring
Sector(s) of use SU22 - Professional uses

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Environmental release category(ies) - ERC8a - Wide dispersive indoor use of processing aids in open systems
 - ERC8d - Wide dispersive outdoor use of processing aids in open systems
Specific Environmental Release Category - ESVOC SpERC 8.11a.v1

Amounts used

Type	Annual site tonnage
Value	4.5
Units	t(ons)/year
Type	Fraction of EU tonnage used in region
Value	0.1
Type	Fraction of regional tonnage used locally
Value	1

Type	Maximum daily site tonnage
Value	12
Units	kg/d

Type	Regional use tonnage
Value	2300
Units	t(ons)/year

Product characteristics

Remarks	Substance is complex UVCB
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Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	365
Release fraction to air from process (initial release prior to RMM)	0.9
Release fraction to wastewater from process (initial release prior to RMM)	0.01
Release fraction to soil from process (initial release prior to RMM)	0.09
Remarks	Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to municipal sewage treatment plant

Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	91.6%
Removal efficiency (total)	91.6%
Sludge treatment	Do not apply industrial sludge to natural soils Sludge should be incinerated, contained or reclaimed

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Risk management measures

Technical onsite conditions and measures to reduce or limit discharges, air emissions	Risk from environmental exposure is driven by freshwater sediment Prevent discharge of undissolved substance to or recover from onsite wastewater
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Control measures to prevent releases

Water	If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of 0% Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of 0% Not applicable as there is no release to wastewater
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Conditions and measures related to external recovery of waste

Method	External recovery and recycling of waste should comply with applicable local and/or national regulations
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Conditions and measures related to external treatment of waste for disposal

Disposal	External treatment and disposal of waste should comply with applicable local and/or national regulations
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Control of worker exposure

Title	General measures applicable to all activities
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Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	H304 - May be fatal if swallowed and enters airways Do NOT induce vomiting
Organisational measures to prevent /limit releases, dispersion and exposure	Do not ingest. If swallowed then seek immediate medical assistance
Remarks	Assumes a good basic standard of occupational hygiene is implemented

Section 3 - Exposure estimation

**Environmental release category(ies) - ERC8a - Wide dispersive indoor use of processing aids in open systems
- ERC8d - Wide dispersive outdoor use of processing aids in open systems
Specific Environmental Release Category - ESVOC SpERC 8.11a.v1**

Predicted No Effect Concentration (PNEC)

Calculation method The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model
Msafe 710 kg/d
Remarks Qualitative approach used to conclude safe use

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	12.5 mg/kg bw/d
Worker - inhalative, long-term - systemic	151 mg/m ³
Consumer - oral, long-term - systemic	7.5 mg/kg bw/d
Consumer - dermal, long-term - systemic	7.5 mg/kg bw/d
Consumer - inhalative, long-term - systemic	32 mg/m ³

Remarks Qualitative approach used to conclude safe use

Section 4 - Guidance to check compliance with the exposure scenario

Further details on scaling and control technologies are provided in SpERC factsheet. Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Air. Risk characterisation ratio (RCR). <= 0.015.

Waste. Water. Risk characterisation ratio (RCR). <= 0.018.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Available hazard data does not support the need for a DNEL to be established for other health effects.

Risk management measures are based on qualitative risk characterization.

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Chemical name Hydrocarbons, C10-C13, aromatics, <1% naphthalene
Pure substance/mixture Substance
REACH registration number 01-2119451097-39-XXXX
EC No (EU Index No) 922-153-0
Supplier Univar Solutions UK Ltd
 Aquarius House
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Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

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Section 1 - Title

Title Fuels
Type Worker
Main user group Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Environmental release category(ies) ERC9a - Wide dispersive indoor use of substances in closed systems ERC9b - Wide dispersive outdoor use of substances in closed systems
Specific Environmental Release Category ESVOC SpERC 9.12b.v1
Process category(ies) PROC1 - Use in closed process, no likelihood of exposure
 PROC2 - Use in closed, continuous process with occasional controlled exposure
 PROC3 - Use in closed batch process (synthesis or formulation)
 PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
 PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
 PROC16 - Using material as fuel sources, limited exposure to unburned product to be expected
Sector(s) of use SU22 - Professional uses

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Environmental release category(ies) - ERC9a - Wide dispersive indoor use of substances in closed systems
 - ERC9b - Wide dispersive outdoor use of substances in closed systems
Specific Environmental Release Category - ESVOC SpERC 9.12b.v1

Amounts used

Type	Annual site tonnage
Value	0.001
Units	t(ons)/year
Type	Fraction of EU tonnage used in region
Value	0.1
Type	Fraction of regional tonnage used locally
Value	1

Type	Maximum daily site tonnage
Value	0.0027
Units	kg/d

Type	Regional use tonnage
Value	2
Units	t(ons)/year

Product characteristics

Remarks	Substance is complex UVCB
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Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	365
Release fraction to air from process (initial release prior to RMM)	0.0001
Release fraction to wastewater from process (initial release prior to RMM)	0.00001
Release fraction to soil from process (initial release prior to RMM)	0.00001
Remarks	Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to municipal sewage treatment plant

Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	91.6%
Removal efficiency (total)	91.6%
Sludge treatment	Do not apply industrial sludge to natural soils Sludge should be incinerated, contained or reclaimed

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Risk management measures

Technical onsite conditions and measures to reduce or limit discharges, air emissions	Risk from environmental exposure is driven by freshwater Prevent discharge of undissolved substance to or recover from onsite wastewater
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Control measures to prevent releases

Water	If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of 0% Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of 0% Not applicable as there is no release to wastewater
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Conditions and measures related to external treatment of waste for disposal

Disposal	This substance is consumed during use and no waste of the substance is generated
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Control of worker exposure

Title	General measures applicable to all activities
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	H304 - May be fatal if swallowed and enters airways Do NOT induce vomiting

Organisational measures to prevent /limit releases, dispersion and exposure	Do not ingest. If swallowed then seek immediate medical assistance
Remarks	Assumes a good basic standard of occupational hygiene is implemented

Section 3 - Exposure estimation

**Environmental release category(ies) - ERC9a - Wide dispersive indoor use of substances in closed systems
- ERC9b - Wide dispersive outdoor use of substances in closed systems**
Specific Environmental Release Category - ESVOC SpERC 9.12b.v1

Predicted No Effect Concentration (PNEC)

Calculation method The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model
Msafe 4.2 kg/d
Remarks Qualitative approach used to conclude safe use

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	12.5 mg/kg bw/d
Worker - inhalative, long-term - systemic	151 mg/m ³
Consumer - oral, long-term - systemic	7.5 mg/kg bw/d
Consumer - dermal, long-term - systemic	7.5 mg/kg bw/d
Consumer - inhalative, long-term - systemic	32 mg/m ³

Remarks Qualitative approach used to conclude safe use

Section 4 - Guidance to check compliance with the exposure scenario

Further details on scaling and control technologies are provided in SpERC factsheet. Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Air. Risk characterisation ratio (RCR). <= 0.0000037.

Waste. Water. Risk characterisation ratio (RCR). <= 0.00065.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Available hazard data does not support the need for a DNEL to be established for other health effects.

Risk management measures are based on qualitative risk characterization.

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Chemical name Hydrocarbons, C10-C13, aromatics, <1% naphthalene
Pure substance/mixture Substance
REACH registration number 01-2119451097-39-XXXX
EC No (EU Index No) 922-153-0
Supplier Univar Solutions UK Ltd
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 6 Mid Point Business Park
 Bradford
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Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

E-mail address SDS.EMEA@univarsolutions.com

Section 1 - Title

Title Functional fluids
Type Worker
Main user group Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Environmental release category(ies) ERC9a - Wide dispersive indoor use of substances in closed systems ERC9b - Wide dispersive outdoor use of substances in closed systems
Specific Environmental Release Category ESVOC SpERC 9.13b.v1
Process category(ies) PROC1 - Use in closed process, no likelihood of exposure
 PROC2 - Use in closed, continuous process with occasional controlled exposure
 PROC3 - Use in closed batch process (synthesis or formulation)
 PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
 PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
 PROC9 - Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
 PROC20 - Heat and pressure transfer fluids in dispersive, professional use but closed systems
Sector(s) of use SU22 - Professional uses

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Environmental release category(ies) - ERC9a - Wide dispersive indoor use of substances in closed systems
 - ERC9b - Wide dispersive outdoor use of substances in closed systems
Specific Environmental Release Category - ESVOC SpERC 9.13b.v1

Amounts used

Type	Annual site tonnage
Value	0.05
Units	t(ons)/year
Type	Fraction of EU tonnage used in region
Value	0.1

Type	Fraction of regional tonnage used locally
Value	1

Type	Maximum daily site tonnage
Value	0.14
Units	kg/d

Type	Regional use tonnage
Value	100
Units	t(ons)/year

Product characteristics

Remarks	Substance is complex UVCB
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Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	365
Release fraction to air from process (initial release prior to RMM)	0.05
Release fraction to wastewater from process (initial release prior to RMM)	0.025
Release fraction to soil from process (initial release prior to RMM)	0.025
Remarks	Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to municipal sewage treatment plant

Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	91.6%
Removal efficiency (total)	91.6%
Sludge treatment	Do not apply industrial sludge to natural soils Sludge should be incinerated, contained or reclaimed

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Risk management measures

Technical onsite conditions and measures to reduce or limit discharges, air emissions	Risk from environmental exposure is driven by freshwater Prevent discharge of undissolved substance to or recover from onsite wastewater
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Control measures to prevent releases

Water	If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of 0% Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of 0% Not applicable as there is no release to wastewater
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Conditions and measures related to external recovery of waste

Method	External recovery and recycling of waste should comply with applicable local and/or national regulations
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Conditions and measures related to external treatment of waste for disposal

Disposal	External treatment and disposal of waste should comply with applicable local and/or national regulations
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Control of worker exposure	
Title	General measures applicable to all activities
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	H304 - May be fatal if swallowed and enters airways Do NOT induce vomiting
Organisational measures to prevent /limit releases, dispersion and exposure	Do not ingest. If swallowed then seek immediate medical assistance
Remarks	Assumes a good basic standard of occupational hygiene is implemented

Title	Drum/batch transfers
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	Use drum pumps or carefully pour from container
Remarks	Assumes a good basic standard of occupational hygiene is implemented

Section 3 - Exposure estimation

Environmental release category(ies) - ERC9a - Wide dispersive indoor use of substances in closed systems
- ERC9b - Wide dispersive outdoor use of substances in closed systems
Specific Environmental Release Category - ESVOC SpERC 9.13b.v1

Predicted No Effect Concentration (PNEC)

Calculation method The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model
Msafe 130 kg/d
Remarks Qualitative approach used to conclude safe use

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	12.5 mg/kg bw/d
Worker - inhalative, long-term - systemic	151 mg/m ³
Consumer - oral, long-term - systemic	7.5 mg/kg bw/d
Consumer - dermal, long-term - systemic	7.5 mg/kg bw/d
Consumer - inhalative, long-term - systemic	32 mg/m ³

Remarks Qualitative approach used to conclude safe use

Section 4 - Guidance to check compliance with the exposure scenario

Further details on scaling and control technologies are provided in SpERC factsheet. Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Air. Risk characterisation ratio (RCR). <= 0.00041.

Waste. Water. Risk characterisation ratio (RCR). <= 0.0011.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Available hazard data does not support the need for a DNEL to be established for other health effects.
Risk management measures are based on qualitative risk characterization.

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Chemical name Hydrocarbons, C10-C13, aromatics, <1% naphthalene
Pure substance/mixture Substance
REACH registration number 01-2119451097-39-XXXX
EC No (EU Index No) 922-153-0
Supplier Univar Solutions UK Ltd
 Aquarius House
 6 Mid Point Business Park
 Bradford
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Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

E-mail address SDS.EMEA@univarsolutions.com

Section 1 - Title

Title road and construction products.
Type Worker
Main user group Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Environmental release category(ies) ERC8d - Wide dispersive outdoor use of processing aids in open systems ERC8f - Wide dispersive outdoor use resulting in inclusion into or onto a matrix
Specific Environmental Release Category ESVOC SpERC 8.15.v1
Process category(ies) PROC1 - Use in closed process, no likelihood of exposure
 PROC2 - Use in closed, continuous process with occasional controlled exposure
 PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
 PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
 PROC9 - Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
 PROC10 - Roller application or brushing
 PROC11 - Non industrial spraying
 PROC13 - Treatment of articles by dipping and pouring

Sector(s) of use SU22 - Professional uses

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Environmental release category(ies) - ERC8d - Wide dispersive outdoor use of processing aids in open systems
 - ERC8f - Wide dispersive outdoor use resulting in inclusion into or onto a matrix
Specific Environmental Release Category - ESVOC SpERC 8.15.v1

Amounts used

Type	Annual site tonnage
Value	0.0005
Units	t(ons)/year
Type	Fraction of EU tonnage used in region
Value	0.1

Type	Fraction of regional tonnage used locally
Value	1

Type	Maximum daily site tonnage
Value	0.0014
Units	kg/d

Type	Regional use tonnage
Value	1
Units	t(ons)/year

Product characteristics

Remarks	Substance is complex UVCB
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Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	365
Release fraction to air from process (initial release prior to RMM)	0.95
Release fraction to wastewater from process (initial release prior to RMM)	0.01
Release fraction to soil from process (initial release prior to RMM)	0.04
Remarks	Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to municipal sewage treatment plant

Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	91.6%
Removal efficiency (total)	91.6%
Sludge treatment	Do not apply industrial sludge to natural soils Sludge should be incinerated, contained or reclaimed

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Risk management measures

Technical onsite conditions and measures to reduce or limit discharges, air emissions	Risk from environmental exposure is driven by freshwater Prevent discharge of undissolved substance to or recover from onsite wastewater
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Control measures to prevent releases

Water	If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of 0% Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of 0% Not applicable as there is no release to wastewater
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Conditions and measures related to external recovery of waste

Method	External recovery and recycling of waste should comply with applicable local and/or national regulations
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Conditions and measures related to external treatment of waste for disposal

Disposal	External treatment and disposal of waste should comply with applicable local and/or national regulations
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Control of worker exposure	
Title	General measures applicable to all activities
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	H304 - May be fatal if swallowed and enters airways Do NOT induce vomiting
Organisational measures to prevent /limit releases, dispersion and exposure	Do not ingest. If swallowed then seek immediate medical assistance
Remarks	Assumes a good basic standard of occupational hygiene is implemented

Section 3 - Exposure estimation

**Environmental release category(ies) - ERC8d - Wide dispersive outdoor use of processing aids in open systems
- ERC8f - Wide dispersive outdoor use resulting in inclusion into or onto a matrix
Specific Environmental Release Category - ESVOC SpERC 8.15.v1**

**Predicted No Effect Concentration
(PNEC)**

Calculation method The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model
Msafe 2.1 kg/d
Remarks Qualitative approach used to conclude safe use

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	12.5 mg/kg bw/d
Worker - inhalative, long-term - systemic	151 mg/m ³
Consumer - oral, long-term - systemic	7.5 mg/kg bw/d
Consumer - dermal, long-term - systemic	7.5 mg/kg bw/d
Consumer - inhalative, long-term - systemic	32 mg/m ³

Remarks Qualitative approach used to conclude safe use

Section 4 - Guidance to check compliance with the exposure scenario

Further details on scaling and control technologies are provided in SpERC factsheet. Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Air. Risk characterisation ratio (RCR). <= 0.0000053.

Waste. Water. Risk characterisation ratio (RCR). <= 0.00065.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Available hazard data does not support the need for a DNEL to be established for other health effects.

Risk management measures are based on qualitative risk characterization.

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Chemical name Hydrocarbons, C10-C13, aromatics, <1% naphthalene
Pure substance/mixture Substance
REACH registration number 01-2119451097-39-XXXX
EC No (EU Index No) 922-153-0
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Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

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Section 1 - Title

Title Use in laboratories
Type Worker
Main user group Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Environmental release category(ies) ERC8a - Wide dispersive indoor use of processing aids in open systems
Specific Environmental Release Category ESVOC SpERC 8.17.v1
Process category(ies) PROC10 - Roller application or brushing
 PROC15 - Use as laboratory reagent
Sector(s) of use SU22 - Professional uses

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Environmental release category(ies) - ERC8a - Wide dispersive indoor use of processing aids in open systems
Specific Environmental Release Category - ESVOC SpERC 8.17.v1

Amounts used

Type	Annual site tonnage
Value	0.00005
Units	t(ons)/year

Type	Fraction of EU tonnage used in region
Value	0.1

Type	Fraction of regional tonnage used locally
Value	1

Type	Maximum daily site tonnage
Value	0.00014
Units	kg/d

Type	Regional use tonnage
Value	0.1
Units	t(ons)/year

Product characteristics

Remarks	Substance is complex UVCB
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Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	365
Release fraction to air from process (initial release prior to RMM)	0.5
Release fraction to wastewater from process (initial release prior to RMM)	0.5
Release fraction to soil from process (initial release prior to RMM)	0
Remarks	Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to municipal sewage treatment plant

Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	91.6%
Removal efficiency (total)	91.6%
Sludge treatment	Do not apply industrial sludge to natural soils Sludge should be incinerated, contained or reclaimed

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Risk management measures

Technical onsite conditions and measures to reduce or limit discharges, air emissions	Risk from environmental exposure is driven by freshwater Prevent discharge of undissolved substance to or recover from onsite wastewater
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Control measures to prevent releases

Air	Treat air emission to provide a typical removal efficiency of 0%
Water	If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of 0% Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of 0% Not applicable as there is no release to wastewater

Conditions and measures related to external recovery of waste

Method	External recovery and recycling of waste should comply with applicable local and/or national regulations
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Conditions and measures related to external treatment of waste for disposal

Disposal	External treatment and disposal of waste should comply with applicable local and/or national regulations
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Control of worker exposure

Title	General measures applicable to all activities
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	H304 - May be fatal if swallowed and enters airways Do NOT induce vomiting
Organisational measures to prevent /limit releases, dispersion and	Do not ingest. If swallowed then seek immediate medical assistance

exposure	
Remarks	Assumes a good basic standard of occupational hygiene is implemented
Title	Laboratory activities
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Remarks	Assumes a good basic standard of occupational hygiene is implemented

Section 3 - Exposure estimation

Environmental release category(ies) - ERC8a - Wide dispersive indoor use of processing aids in open systems
Specific Environmental Release Category - ESVOC SpERC 8.17.v1

**Predicted No Effect Concentration
(PNEC)**

Calculation method The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model
Msafe 0.21 kg/d
Remarks Qualitative approach used to conclude safe use

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	12.5 mg/kg bw/d
Worker - inhalative, long-term - systemic	151 mg/m ³
Consumer - oral, long-term - systemic	7.5 mg/kg bw/d
Consumer - dermal, long-term - systemic	7.5 mg/kg bw/d
Consumer - inhalative, long-term - systemic	32 mg/m ³

Remarks Qualitative approach used to conclude safe use

Section 4 - Guidance to check compliance with the exposure scenario

Further details on scaling and control technologies are provided in SpERC factsheet. Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Air. Risk characterisation ratio (RCR). <= 0.000012.

Waste. Water. Risk characterisation ratio (RCR). <= 0.00066.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Available hazard data does not support the need for a DNEL to be established for other health effects.

Risk management measures are based on qualitative risk characterization.

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Chemical name Hydrocarbons, C10-C13, aromatics, <1% naphthalene
Pure substance/mixture Substance
REACH registration number 01-2119451097-39-XXXX
EC No (EU Index No) 922-153-0
Supplier Univar Solutions UK Ltd
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 6 Mid Point Business Park
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Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

E-mail address SDS.EMEA@univarsolutions.com

Section 1 - Title

Title Use in polymer processing.
Type Worker
Main user group Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Environmental release category(ies) ERC8a - Wide dispersive indoor use of processing aids in open systems ERC8d - Wide dispersive outdoor use of processing aids in open systems
Specific Environmental Release Category ESVOC SpERC 8.21b.v1
Process category(ies) PROC1 - Use in closed process, no likelihood of exposure
 PROC2 - Use in closed, continuous process with occasional controlled exposure
 PROC6 - Calendaring operations
 PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
 PROC8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
 PROC14 - Production of preparations or articles by tableting, compression, extrusion, pelettising
 PROC21 - Low energy manipulation of substances bound in materials and/or articles
 SU22 - Professional uses

Sector(s) of use

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Environmental release category(ies) - ERC8a - Wide dispersive indoor use of processing aids in open systems
 - ERC8d - Wide dispersive outdoor use of processing aids in open systems
Specific Environmental Release Category - ESVOC SpERC 8.21b.v1

Amounts used

Type	Annual site tonnage
Value	0.0005
Units	t(ons)/year

Type	Fraction of EU tonnage used in region
Value	0.1

Type	Fraction of regional tonnage used locally
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Value	1
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Type	Maximum daily site tonnage
Value	0.0014
Units	kg/d

Type	Regional use tonnage
Value	1
Units	t(ons)/year

Product characteristics

Remarks	Substance is complex UVCB
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Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	365
Release fraction to air from process (initial release prior to RMM)	0.98
Release fraction to wastewater from process (initial release prior to RMM)	0.01
Release fraction to soil from process (initial release prior to RMM)	0.01
Remarks	Common practices vary across sites, thus conservative process release estimates used.

Conditions and measures related to municipal sewage treatment plant

Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	91.6%
Removal efficiency (total)	91.6%
Sludge treatment	Do not apply industrial sludge to natural soils Sludge should be incinerated, contained or reclaimed

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Risk management measures

Technical onsite conditions and measures to reduce or limit discharges, air emissions	Risk from environmental exposure is driven by freshwater Prevent discharge of undissolved substance to or recover from onsite wastewater
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Control measures to prevent releases

Water	If discharging to domestic sewage treatment plant, provide the required onsite wastewater removal efficiency of 0% Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of 0% Not applicable as there is no release to wastewater
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Conditions and measures related to external recovery of waste

Method	External recovery and recycling of waste should comply with applicable local and/or national regulations
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Conditions and measures related to external treatment of waste for disposal

Disposal	External treatment and disposal of waste should comply with applicable local and/or national regulations
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Control of worker exposure

Title	General measures applicable to all activities
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	H304 - May be fatal if swallowed and enters airways Do NOT induce vomiting
Organisational measures to prevent /limit releases, dispersion and exposure	Do not ingest. If swallowed then seek immediate medical assistance
Remarks	Assumes a good basic standard of occupational hygiene is implemented

Section 3 - Exposure estimation

**Environmental release category(ies) - ERC8a - Wide dispersive indoor use of processing aids in open systems
- ERC8d - Wide dispersive outdoor use of processing aids in open systems**
Specific Environmental Release Category - ESVOC SpERC 8.21b.v1

**Predicted No Effect Concentration
(PNEC)**

Calculation method The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model
Msafe 2.1 kg/d
Remarks Qualitative approach used to conclude safe use

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	12.5 mg/kg bw/d
Worker - inhalative, long-term - systemic	151 mg/m ³
Consumer - oral, long-term - systemic	7.5 mg/kg bw/d
Consumer - dermal, long-term - systemic	7.5 mg/kg bw/d
Consumer - inhalative, long-term - systemic	32 mg/m ³

Remarks Qualitative approach used to conclude safe use

Section 4 - Guidance to check compliance with the exposure scenario

Further details on scaling and control technologies are provided in SpERC factsheet. Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Air. Risk characterisation ratio (RCR). <= 0.0000053.

Waste. Water. Risk characterisation ratio (RCR). <= 0.00065.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Available hazard data does not support the need for a DNEL to be established for other health effects.

Risk management measures are based on qualitative risk characterization.

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Chemical name Hydrocarbons, C10-C13, aromatics, <1% naphthalene
Pure substance/mixture Substance
REACH registration number 01-2119451097-39-XXXX
EC No (EU Index No) 922-153-0
Supplier Univar Solutions UK Ltd
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Section 1 - Title

Title Coatings
Type Consumer
Main user group Consumer uses: Private households (= general public = consumers)
Environmental release category(ies) ERC8a - Wide dispersive indoor use of processing aids in open systems ERC8d - Wide dispersive outdoor use of processing aids in open systems
Specific Environmental Release Category ESVOC SpERC 8.3c.v1
Product category(ies) PC1 - Adhesives, sealants PC4 - Anti-freeze and de-icing products PC8 - Biocidal Products (e.g. disinfectants, pest control) PC9a - Coatings and paints, thinners, paint removers PC9b - Fillers, putties, plasters, modelling clay PC9c - Finger paints PC15 - Non-metal-surface treatment products PC18 - Ink and toners PC23 - Leather tanning, dye, finishing, impregnation and care products PC24 - Lubricants, greases, release products PC31 - Polishes and wax blends PC34 - Textile dyes, finishing and impregnating products; including bleaches and other processing aids
Sector(s) of use SU21 - Consumer uses

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Environmental release category(ies) - ERC8a - Wide dispersive indoor use of processing aids in open systems
 - ERC8d - Wide dispersive outdoor use of processing aids in open systems
Specific Environmental Release Category - ESVOC SpERC 8.3c.v1

Amounts used

Type	Annual site tonnage
Value	0.00055
Units	t(ons)/year

Type	Fraction of EU tonnage used in region
Value	0.1

Type	Fraction of regional tonnage used locally
Value	0.0005

Type	Maximum daily site tonnage
Value	0.0015

Units	kg/d
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Type	Regional use tonnage
Value	1.1
Units	t(ons)/year

Product characteristics

Remarks	Substance is complex UVCB
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Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	365
Release fraction to air from process (initial release prior to RMM)	0.985
Release fraction to wastewater from process (initial release prior to RMM)	0.01
Release fraction to soil from process (initial release prior to RMM)	0.005

Conditions and measures related to municipal sewage treatment plant

Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	91.6%

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Control measures to prevent releases

Water	Not applicable as there is no release to wastewater
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Conditions and measures related to external recovery of waste

Method	External recovery and recycling of waste should comply with applicable local and/or national regulations
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Conditions and measures related to external treatment of waste for disposal

Disposal	External treatment and disposal of waste should comply with applicable local and/or national regulations
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Control of consumer exposure

Title	General measures applicable to all activities
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Risk management measures	H304 - May be fatal if swallowed and enters airways Do not ingest. If swallowed then seek immediate medical assistance Do NOT induce vomiting HARMFUL - MAY CAUSE LUNG DAMAGE IF SWALLOWED Keep away from children

Section 3 - Exposure estimation

Environmental release category(ies) - ERC8a - Wide dispersive indoor use of processing aids in open systems
- ERC8d - Wide dispersive outdoor use of processing aids in open systems
Specific Environmental Release Category - ESVOC SpERC 8.3c.v1

Predicted No Effect Concentration

(PNEC)

Calculation method	The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model
Msafe	2.3 kg/d
Remarks	Qualitative approach used to conclude safe use

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	12.5 mg/kg bw/d
Worker - inhalative, long-term - systemic	151 mg/m ³
Consumer - oral, long-term - systemic	7.5 mg/kg bw/d
Consumer - dermal, long-term - systemic	7.5 mg/kg bw/d
Consumer - inhalative, long-term - systemic	32 mg/m ³

Remarks	Qualitative approach used to conclude safe use
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Section 4 - Guidance to check compliance with the exposure scenario

Further details on scaling and control technologies are provided in SpERC factsheet. Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Air. Risk characterisation ratio (RCR). ≤ 0.0000055 .

Waste. Water. Risk characterisation ratio (RCR). ≤ 0.00065 .

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Chemical name Hydrocarbons, C10-C13, aromatics, <1% naphthalene
Pure substance/mixture Substance
REACH registration number 01-2119451097-39-XXXX
EC No (EU Index No) 922-153-0
Supplier Univar Solutions UK Ltd
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Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

E-mail address SDS.EMEA@univarsolutions.com

Section 1 - Title

Title Use in agrochemicals
Type Consumer
Main user group Consumer uses: Private households (= general public = consumers)
Environmental release category(ies) ERC8a - Wide dispersive indoor use of processing aids in open systems ERC8d - Wide dispersive outdoor use of processing aids in open systems
Specific Environmental Release Category ESVOC SpERC 8.11b.v1
Product category(ies) PC12 - Fertilisers PC27 - Plant protection products
Sector(s) of use SU21 - Consumer uses

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Environmental release category(ies) - ERC8a - Wide dispersive indoor use of processing aids in open systems
 - ERC8d - Wide dispersive outdoor use of processing aids in open systems
Specific Environmental Release Category - ESVOC SpERC 8.11b.v1

Amounts used

Type	Annual site tonnage
Value	0.09
Units	t(ons)/year

Type	Fraction of EU tonnage used in region
Value	0.1

Type	Fraction of regional tonnage used locally
Value	0.0005

Type	Maximum daily site tonnage
Value	0.25
Units	kg/d

Type	Regional use tonnage
Value	45
Units	t(ons)/year

Product characteristics

Remarks	Substance is complex UVCB
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Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	365
Release fraction to air from process (initial release prior to RMM)	0.9
Release fraction to wastewater from process (initial release prior to RMM)	0.01
Release fraction to soil from process (initial release prior to RMM)	0.09

Conditions and measures related to municipal sewage treatment plant

Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	91.6%

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Control measures to prevent releases

Water	Not applicable as there is no release to wastewater
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Conditions and measures related to external recovery of waste

Method	External recovery and recycling of waste should comply with applicable local and/or national regulations
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Conditions and measures related to external treatment of waste for disposal

Disposal	External treatment and disposal of waste should comply with applicable local and/or national regulations
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Control of consumer exposure

Title	General measures applicable to all activities
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Risk management measures	H304 - May be fatal if swallowed and enters airways Do not ingest. If swallowed then seek immediate medical assistance Do NOT induce vomiting HARMFUL - MAY CAUSE LUNG DAMAGE IF SWALLOWED Keep away from children

Section 3 - Exposure estimation

Environmental release category(ies) - ERC8a - Wide dispersive indoor use of processing aids in open systems
- ERC8d - Wide dispersive outdoor use of processing aids in open systems
Specific Environmental Release Category - ESVOC SpERC 8.11b.v1

Predicted No Effect Concentration (PNEC)

Calculation method The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model

Msafe 260 kg/d
Remarks Qualitative approach used to conclude safe use

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	12.5 mg/kg bw/d
Worker - inhalative, long-term - systemic	151 mg/m ³
Consumer - oral, long-term - systemic	7.5 mg/kg bw/d
Consumer - dermal, long-term - systemic	7.5 mg/kg bw/d
Consumer - inhalative, long-term - systemic	32 mg/m ³

Remarks Qualitative approach used to conclude safe use

Section 4 - Guidance to check compliance with the exposure scenario

Further details on scaling and control technologies are provided in SpERC factsheet. Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Air. Risk characterisation ratio (RCR). ≤ 0.0003 .

Waste. Water. Risk characterisation ratio (RCR). ≤ 0.00096 .

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Chemical name Hydrocarbons, C10-C13, aromatics, <1% naphthalene
Pure substance/mixture Substance
REACH registration number 01-2119451097-39-XXXX
EC No (EU Index No) 922-153-0
Supplier Univar Solutions UK Ltd
 Aquarius House
 6 Mid Point Business Park
 Bradford
 GBR

Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

E-mail address SDS.EMEA@univarsolutions.com

Section 1 - Title

Title Fuels
Type Consumer
Main user group Consumer uses: Private households (= general public = consumers)
Environmental release category(ies) ERC9a - Wide dispersive indoor use of substances in closed systems ERC9b - Wide dispersive outdoor use of substances in closed systems
Specific Environmental Release Category ESVOC SpERC 9.12c.v1
Product category(ies) PC13 - Fuels
Sector(s) of use SU21 - Consumer uses

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Environmental release category(ies) - ERC9a - Wide dispersive indoor use of substances in closed systems
 - ERC9b - Wide dispersive outdoor use of substances in closed systems
Specific Environmental Release Category - ESVOC SpERC 9.12c.v1

Amounts used

Type	Annual site tonnage
Value	0.0085
Units	t(ons)/year

Type	Fraction of EU tonnage used in region
Value	0.1

Type	Fraction of regional tonnage used locally
Value	0.0005

Type	Maximum daily site tonnage
Value	0.023
Units	kg/d

Type	Regional use tonnage
Value	17
Units	t(ons)/year

Product characteristics

Remarks	Substance is complex UVCB
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Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	365
Release fraction to air from process (initial release prior to RMM)	0.0001
Release fraction to wastewater from process (initial release prior to RMM)	0.00001
Release fraction to soil from process (initial release prior to RMM)	0.00001

Conditions and measures related to municipal sewage treatment plant

Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	91.6%

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Control measures to prevent releases

Water	Not applicable as there is no release to wastewater
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Conditions and measures related to external treatment of waste for disposal

Disposal	External treatment and disposal of waste should comply with applicable local and/or national regulations
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Control of consumer exposure

Title	General measures applicable to all activities
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Risk management measures	H304 - May be fatal if swallowed and enters airways Do not ingest. If swallowed then seek immediate medical assistance Do NOT induce vomiting HARMFUL - MAY CAUSE LUNG DAMAGE IF SWALLOWED Keep away from children

Section 3 - Exposure estimation

Environmental release category(ies) - ERC9a - Wide dispersive indoor use of substances in closed systems

- ERC9b - Wide dispersive outdoor use of substances in closed systems

Specific Environmental Release Category - ESVOC SpERC 9.12c.v1

Predicted No Effect Concentration (PNEC)

Calculation method

The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model

Msafe

36 kg/d

Remarks

Qualitative approach used to conclude safe use

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	12.5 mg/kg bw/d
Worker - inhalative, long-term - systemic	151 mg/m ³
Consumer - oral, long-term - systemic	7.5 mg/kg bw/d
Consumer - dermal, long-term - systemic	7.5 mg/kg bw/d
Consumer - inhalative, long-term - systemic	32 mg/m ³

Remarks Qualitative approach used to conclude safe use

Section 4 - Guidance to check compliance with the exposure scenario

Further details on scaling and control technologies are provided in SpERC factsheet. Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Air. Risk characterisation ratio (RCR). ≤ 0.0000037 .

Waste. Water. Risk characterisation ratio (RCR). ≤ 0.00065 .

Annex to the Safety Data Sheet according to Regulation (EC) No 1907/2006 [REACH]

Chemical name Hydrocarbons, C10-C13, aromatics, <1% naphthalene
Pure substance/mixture Substance
REACH registration number 01-2119451097-39-XXXX
EC No (EU Index No) 922-153-0
Supplier Univar Solutions UK Ltd
 Aquarius House
 6 Mid Point Business Park
 Bradford
 GBR

Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

E-mail address SDS.EMEA@univarsolutions.com

Section 1 - Title

Title Functional fluids
Type Consumer
Main user group Consumer uses: Private households (= general public = consumers)
Environmental release category(ies) ERC9a - Wide dispersive indoor use of substances in closed systems ERC9b - Wide dispersive outdoor use of substances in closed systems
Specific Environmental Release Category ESVOC SpERC 9.13c.v1
Product category(ies) PC16 - Heat transfer fluids PC17 - Hydraulic fluids
Sector(s) of use SU21 - Consumer uses

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Environmental release category(ies) - ERC9a - Wide dispersive indoor use of substances in closed systems
 - ERC9b - Wide dispersive outdoor use of substances in closed systems
Specific Environmental Release Category - ESVOC SpERC 9.13c.v1

Amounts used

Type	Annual site tonnage
Value	0.05
Units	t(ons)/year

Type	Fraction of EU tonnage used in region
Value	0.1

Type	Fraction of regional tonnage used locally
Value	0.0005

Type	Maximum daily site tonnage
Value	0.14
Units	kg/d

Type	Regional use tonnage
Value	100
Units	t(ons)/year

Product characteristics

Remarks	Substance is complex UVCB
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Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	365
Release fraction to air from process (initial release prior to RMM)	0.05
Release fraction to wastewater from process (initial release prior to RMM)	0.025
Release fraction to soil from process (initial release prior to RMM)	0.025

Conditions and measures related to municipal sewage treatment plant

Assumed domestic sewage treatment plant flow	2000 m3/d
Removal efficiency fraction (offsite; STP)	91.6%

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Control measures to prevent releases

Water	Not applicable as there is no release to wastewater
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Conditions and measures related to external recovery of waste

Method	External recovery and recycling of waste should comply with applicable local and/or national regulations
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Conditions and measures related to external treatment of waste for disposal

Disposal	External treatment and disposal of waste should comply with applicable local and/or national regulations
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Control of consumer exposure

Title	General measures applicable to all activities
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Risk management measures	H304 - May be fatal if swallowed and enters airways Do not ingest. If swallowed then seek immediate medical assistance Do NOT induce vomiting HARMFUL - MAY CAUSE LUNG DAMAGE IF SWALLOWED Keep away from children

Section 3 - Exposure estimation

Environmental release category(ies) - ERC9a - Wide dispersive indoor use of substances in closed systems
- ERC9b - Wide dispersive outdoor use of substances in closed systems
Specific Environmental Release Category - ESVOC SpERC 9.13c.v1

Predicted No Effect Concentration (PNEC)

Calculation method

The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model

Msafe

130 kg/d

Remarks Qualitative approach used to conclude safe use

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	12.5 mg/kg bw/d
Worker - inhalative, long-term - systemic	151 mg/m ³
Consumer - oral, long-term - systemic	7.5 mg/kg bw/d
Consumer - dermal, long-term - systemic	7.5 mg/kg bw/d
Consumer - inhalative, long-term - systemic	32 mg/m ³

Remarks Qualitative approach used to conclude safe use

Section 4 - Guidance to check compliance with the exposure scenario

Further details on scaling and control technologies are provided in SpERC factsheet. Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Air. Risk characterisation ratio (RCR). ≤ 0.00041 .

Waste. Water. Risk characterisation ratio (RCR). ≤ 0.0011 .