

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

Supersedes date 28-Oct-2022

Revision date 30-Aug-2024

Revision Number 6

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

1.1. Product identifier

Product Code(s)	11400
Safety data sheet number	11400
Product Name	PMA
Index No	607-195-00-7
EC Number	203-603-9
Synonyms	DOWANOL PMA GLYCOL ETHER ACETATE, DOWANOL PMA, PMA, METHOXYPROPYL ACETATE (PMA), DT M192 HEAVY THINNER
Pure substance/mixture	Substance
Contains 2-METHOXY-1-METHYLETHYL ACETATE	

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use	Industrial use Solvent Chemical intermediate Cleaning agent Coatings Additive for Agrochemicals For further information, see attached Exposure Scenario
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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

Flammable liquids	Category 3 - (H226)
Specific target organ toxicity — single exposure	Category 3 - (H336)
Category 3 Narcotic effects	

2.2. Label elements

Contains 2-METHOXY-1-METHYLETHYL ACETATE

**Signal word**

Warning

Hazard statements

H336 - May cause drowsiness or dizziness

H226 - Flammable liquid and vapour

Precautionary statements

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P312 - Call a POISON CENTER or doctor if you feel unwell

P370 + P378 - In case of fire: Use dry chemical, CO₂, water spray or alcohol-resistant foam to extinguish

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)
2-METHOXY-1-METHYLETHYL ACETATE 108-65-6	> 99.5 %	203-603-9	-	Flam. Liq. 3 (H226) STOT SE 3 (H336)	-	-	-
2-METHOXYPROPYL ACETATE 70657-70-4	<0.3%	274-724-2	-	Flam. Liq. 3 (H226) Repr. 1B (H360D) STOT SE 3 (H335)	-	-	-

Full text of H- and EUH-phrases: see section 16This 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	Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air. IF exposed or concerned: Get medical advice/attention.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a doctor.
Self-protection of the first aider	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information.

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

Symptoms	Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
Inhalation	Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
Eyes	May cause temporary eye irritation.

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

Note to doctors	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Dry chemical. Carbon dioxide (CO ₂). Water spray. Alcohol resistant foam.
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.
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5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
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Hazardous combustion products	Carbon oxides.
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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.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.
Other information	Ventilate the area. 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	Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.
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6.3. Methods and material for containment and cleaning up

Methods for containment	Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapour suppressing foam may be used to reduce vapours. Dyke far ahead of spill to collect run-off water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
Methods for cleaning up	Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers. Use explosion proof electric equipment.
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.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use personal protection equipment. Avoid contact with skin and eyes. Avoid breathing vapours or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. In case of insufficient ventilation, wear suitable respiratory equipment.

General hygiene considerations

Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Ensure that eyewash stations and safety showers are close to the workstation location.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labelled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers.

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

Chemical name	United Kingdom
2-METHOXY-1-METHYLETHYL ACETATE 108-65-6	TWA: 50 ppm TWA: 274 mg/m ³ STEL: 100 ppm STEL: 548 mg/m ³ Sk*

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
2-METHOXY-1-METHYLETHYL ACETATE 108-65-6		796 mg/kg/day [4] [6]	275 mg/m ³ [4] [6]

[4] Systemic health effects.

[6] Long term.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
2-METHOXY-1-METHYLETHYL ACETATE 108-65-6	36 mg/kg/day [4] [6]	320 mg/kg/day [4] [6]	33 mg/m ³ [4] [6]

[4] Systemic health effects.

[6] Long term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
2-METHOXY-1-METHYLETHYL ACETATE 108-65-6	0.635 mg/l	6.35 mg/L	0.0635 mg/l		

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
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2-METHOXY-1-METHYLETHYL ACETATE 108-65-6	3.29 mg/kg	0.329 mg/kg	100 mg/L	0.29 mg/kg	100 mg/l
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8.2. Exposure controls

Engineering controls

Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection

Tight sealing safety goggles. Use eye protection according to EN 166.

Hand protection

Wear suitable gloves. Impervious gloves. 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.

Gloves			
Duration of contact	PPE - Glove material	Glove thickness	Break through time
	Butyl rubber Ethyl vinyl alcohol laminate ("EVAL") Nitrile rubber Neoprene gloves	>0.35 mm	>240 minutes

Skin and body protection

Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Gas filter, type A.

General hygiene considerations

Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Ensure that eyewash stations and safety showers are close to the workstation location.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Liquid
Colour	Colourless
Odour	Ether.
Odour threshold	No information available

Property	Values	Remarks • Method
Melting point / freezing point	-66 °C	No information available.
Initial boiling point and boiling range	145.8 °C	No information available.
Flammability		No information available.
Flammability Limit in Air		No information available.
Upper flammability or explosive limits	7.0 % vol	
Lower flammability or explosive limits	1.5 % vol	
Flash point	45.5 °C	Closed cup.
Autoignition temperature	333 °C	No information available.
Decomposition temperature		No information available.
pH		No information available.
pH (as aqueous solution)		No information available.
Kinematic viscosity	1.23 mm ² /s	@ 20 °C.
Dynamic viscosity	1.1 mPa s @ 25°C	No information available.
Water solubility	Soluble in water 247g/l	No information available.
Solubility(ies)		No information available.
Partition coefficient	log Pow: 1.2	No information available.
Vapour pressure	355 Pa @ 20°C	No information available.
Relative density	0.967 @ 20°C	No information available.
Bulk density		No information available
Liquid Density	No information available	No information available

Relative vapour density	4.6	No information available.
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

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Stable under recommended storage conditions.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge Yes.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Flammable liquid and vapour. Vapours can form explosive mixtures with air.

10.4. Conditions to avoid

Conditions to avoid Heat, flames and sparks. static discharge (electrostatic discharge).

10.5. Incompatible materials

Incompatible materials Strong acids. 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	May cause drowsiness or dizziness.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Acute toxicity

Numerical measures of toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
2-METHOXY-1-METHYLETHYL ACETATE	= 8532 mg/kg (Rat)	> 5 g/kg (Rabbit)	= 16000 mg/m ³ (Rat) 6 h
2-METHOXYPROPYL ACETATE	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 2.46 mg/l (Rabbit) 4h

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

Skin corrosion/irritation Based on available data the classification criteria are not met.

Serious eye damage/eye irritation Based on available data the classification criteria are not met.

Respiratory or skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity Based on available data the classification criteria are not met.

Carcinogenicity Based on available data the classification criteria are not met.

Reproductive toxicity Based on available data the classification criteria are not met.

Chemical name	United Kingdom
2-METHOXYPROPYL ACETATE	Repr. 1B

STOT - single exposure May cause drowsiness or dizziness.

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard Based on available data the classification criteria are not met.

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Not considered to be harmful to aquatic life.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
2-METHOXY-1-METHYLETHYL ACETATE	ErC50 > 1000 mg/l Pseudokirchneriella subcapitata (96h)	LC50: =161mg/L (96h, Pimephales promelas)	-	EC50: >500mg/L (48h, Daphnia magna)

12.2. Persistence and degradability

Persistence and degradability Readily biodegradable.

Method	Exposure time	Value	Results
OECD Test No. 301F: Ready Biodegradability: Manometric Respirometry Test (TG 301 F)	28 days	83%	Readily biodegradable

12.3. Bioaccumulative potential

Bioaccumulation Not likely to bioaccumulate.

Bioconcentration factor (BCF) <100

Component Information

Chemical name	Partition coefficient
2-METHOXY-1-METHYLETHYL ACETATE	1.2

12.4. Mobility in soil

Mobility in soil No information available.

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
2-METHOXY-1-METHYLETHYL ACETATE	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	Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.
Contaminated packaging	Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

SECTION 14: Transport information

IATA	
14.1 UN number or ID number	UN3272
14.2 UN proper shipping name	ESTERS, N.O.S. (2-METHOXY-1-METHYLETHYL ACETATE, 2-METHOXYPROPYL ACETATE)
14.3 Transport hazard class(es)	3
14.4 Packing group	III
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	A3
ERG Code	3L

IMDG	
14.1 UN number or ID number	UN3272
UN proper shipping name	ESTERS, N.O.S. (2-METHOXY-1-METHYLETHYL ACETATE, 2-METHOXYPROPYL ACETATE)
14.3 Transport hazard class(es)	3
14.4 Packing group	III
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	223, 274
EmS-No	F-E, S-D
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID	
14.1 UN number or ID number	UN3272
14.2 UN proper shipping name	ESTERS, N.O.S. (2-METHOXY-1-METHYLETHYL ACETATE, 2-METHOXYPROPYL ACETATE)
14.3 Transport hazard class(es)	3
14.4 Packing group	III
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	274, 601
Classification code	F1

ADR	
14.1 UN number or ID number	UN3272
14.2 UN proper shipping name	ESTERS, N.O.S. (2-METHOXY-1-METHYLETHYL ACETATE, 2-METHOXYPROPYL ACETATE)
14.3 Transport hazard class(es)	3
14.4 Packing group	III
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	274, 601
Classification code	F1
Tunnel restriction code	(D/E)

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).

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
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2-METHOXYPROPYL ACETATE - 70657-70-4	Use restricted. See item 30. Restricted Reproductive Toxin 1B	-
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Persistent Organic Pollutants

Not applicable

Export Notification requirements

Not applicable

Dangerous substance category per COMAH Regulations 2015 (as amended)

P5c - FLAMMABLE LIQUIDS

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
KECI - 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

H226 - Flammable liquid and vapour
H336 - May cause drowsiness or dizziness

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 **SDS sections updated 1 9 16**

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 K Winter
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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

Exposure scenario Manufacture of substance

Identification

Product name	1-METHOXY-2-PROPYL ACETATE
REACH registration number	01-2119475791-29-XXXX
CAS number	108-65-6
EC number	203-603-9
EU index number	607-195-00-7
Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com

1. Title of exposure scenario

Main title	Manufacture of substance
Process scope	Manufacture of the substance or use as a process chemical or extraction agent. Includes recycling/recovery, material transfers, storage, maintenance and loading (including marine vessel/barge, road/rail car and bulk container), sampling and associated laboratory activities.
Main sector	SU3 Industrial uses
<u>Environment</u>	
Environmental release category	ERC1 Manufacture of the substance
<u>Worker</u>	
Process category	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4 Chemical production where opportunity for exposure arises PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC15 Use as laboratory reagent.

2. Conditions of use affecting exposure (Industrial - Environment 1)

Product characteristics

Manufacture of substance

Physical state	Liquid
Concentration details	Covers concentrations up to 100 %.

Amounts used

Maximum daily site tonnage: 288000 kg

Frequency and duration of use

Emission days: 300 days/year

Environmental factors not influenced by risk management measures

Dilution	Local freshwater dilution factor: 19709 (Measured)
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Risk management measures

Good practice	Site should have a spill plan to ensure that adequate safeguards are in place to minimise the impact of episodic releases.
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Technical onsite conditions and measures to reduce or limit discharges to air, water and soil

Air	Use vapour recovery units when necessary.
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Conditions and measures related to external treatment of waste for disposal

Waste treatment	Aerobic biological treatment
Disposal method	Contain and dispose of waste according to local regulations.

2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid
Concentration details	Covers concentrations up to 100 %.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Other given operational conditions affecting workers exposure

Setting	Indoor use.
Temperature	Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Technical conditions and measures at process level (source) to prevent release

Technical protective measures	Control any potential exposure using measures such as contained or enclosed systems, properly designed and maintained facilities and a good standard of general ventilation. Drain down systems and clear transfer lines prior to breaking containment. Drain down and flush equipment where possible prior to maintenance. Where there is potential for exposure: Ensure relevant staff are informed of the nature of exposure and aware of basic actions to minimise exposures; Ensure suitable personal protective equipment is available; Clear up spills and dispose of waste in accordance with regulatory requirements; monitor effectiveness of control measures; consider the need for health surveillance; identify and implement corrective actions.
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Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures	Assumes a good basic standard of occupational hygiene is implemented.
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Risk management measures

Manufacture of substance

Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contamination immediately. Provide basic employee training to prevent/minimise exposures and to report any skin problems that may develop.

3. Exposure estimation (Environment 1)

Assessment method	Used ECETOC TRA model.
Environmental exposure	Fresh water: Exposure 0.0022 mg/l, PNEC 0.635 mg/l, RCR 0.004 freshwater sediment: Exposure 0.0114 mg/kg, PNEC 3.29 mg/kg, RCR 0.003 Marine water: Exposure 0.0004 mg/l, PNEC 0.0635 mg/l, RCR 0.0007 marine sediment: Exposure 0.0021 mg/kg, PNEC 0.329 mg/kg, RCR 0.003 Soil: Exposure 0.001 mg/kg, PNEC 0.29 mg/kg, RCR 0.007

4. Guidance to check compliance with the exposure scenario (Environment 1)

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

3. Exposure estimation (Health 1)

Assessment method	The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated
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Manufacture of substance

Exposure

PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

Worker - inhalation, long-term - systemic: Exposure 0.06 mg/m³, DNEL 275 mg/m³, RCR <0.01

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

Worker - inhalation, long-term - systemic: Exposure 5.51 mg/m³, DNEL 275 mg/m³, RCR 0.02

Worker - dermal, long-term - systemic: Exposure 1.37 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.01

PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

Worker - inhalation, long-term - systemic: Exposure 16.53 mg/m³, DNEL 275 mg/m³, RCR 0.06

PROC4 Chemical production where opportunity for exposure arises

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.04

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.09

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.04

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

PROC15 Use as laboratory reagent.

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

4. Guidance to check compliance with the exposure scenario (Health 1)

Estimated workplace exposures are not expected to exceed DNELs when the identified risk management measures are adopted. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Exposure scenario Use as a process solvent

Identification

Product name	1-METHOXY-2-PROPYL ACETATE
REACH registration number	01-2119475791-29-XXXX
CAS number	108-65-6
EC number	203-603-9
EU index number	607-195-00-7
Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com

1. Title of exposure scenario

Main title	Use as a process solvent
Process scope	Manufacture of the substance or use as a process chemical or extraction agent. Includes recycling/recovery, material transfers, storage, maintenance and loading (including marine vessel/barge, road/rail car and bulk container), sampling and associated laboratory activities.
Main sector	SU3 Industrial uses
<u>Environment</u>	
Environmental release category	ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
SPERC	ESVOC SPERC 4.21a.v1
<u>Worker</u>	
Process category	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4 Chemical production where opportunity for exposure arises PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC15 Use as laboratory reagent.

2. Conditions of use affecting exposure (Industrial - Environment 1)

Use as a process solvent

Product characteristics

Physical state	Liquid
Concentration details	Covers concentrations up to 100 %.

Amounts used

Maximum daily site tonnage: 2200 kg

Frequency and duration of use

Emission days: 300 days/year

Risk management measures

Good practice	Site should have a spill plan to ensure that adequate safeguards are in place to minimise the impact of episodic releases.
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Technical onsite conditions and measures to reduce or limit discharges to air, water and soil

Air	Use vapour recovery units when necessary.
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Conditions and measures related to external treatment of waste for disposal

Waste treatment	Aerobic biological treatment
Disposal method	Contain and dispose of waste according to local regulations.

2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid
Concentration details	Covers concentrations up to 100 %.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Other given operational conditions affecting workers exposure

Setting	Indoor use.
Temperature	Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Technical conditions and measures at process level (source) to prevent release

Technical protective measures	Control any potential exposure using measures such as contained or enclosed systems, properly designed and maintained facilities and a good standard of general ventilation. Drain down systems and clear transfer lines prior to breaking containment. Drain down and flush equipment where possible prior to maintenance. Where there is potential for exposure: Ensure relevant staff are informed of the nature of exposure and aware of basic actions to minimise exposures; Ensure suitable personal protective equipment is available; Clear up spills and dispose of waste in accordance with regulatory requirements; monitor effectiveness of control measures; consider the need for health surveillance; identify and implement corrective actions.
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Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures	Assumes a good basic standard of occupational hygiene is implemented.
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Risk management measures

Use as a process solvent

Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contamination immediately. Provide basic employee training to prevent/minimise exposures and to report any skin problems that may develop.

3. Exposure estimation (Environment 1)

Assessment method	Used ECETOC TRA model.
Environmental exposure	Fresh water: Exposure 0.0022 mg/l, PNEC 0.635 mg/l, RCR 0.004 freshwater sediment: Exposure 0.0114 mg/kg, PNEC 3.29 mg/kg, RCR 0.004 Marine water: Exposure 0.0004 mg/l, PNEC 0.0635 mg/l, RCR 0.0006 marine sediment: Exposure 0.0020 mg/kg, PNEC 0.329 mg/kg, RCR 0.006 Soil: Exposure 0.00127 mg/kg, PNEC 0.29 mg/kg, RCR 0.005

4. Guidance to check compliance with the exposure scenario (Environment 1)

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. Further details on scaling and control technologies are provided in SpERC factsheet (<http://cefic.org/en/reach-for-industries-libraries.html>).

3. Exposure estimation (Health 1)

Assessment method	The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated
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Use as a process solvent

Exposure

PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

Worker - inhalation, long-term - systemic: Exposure 0.06 mg/m³, DNEL 275 mg/m³, RCR <0.01

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

Worker - inhalation, long-term - systemic: Exposure 5.51 mg/m³, DNEL 275 mg/m³, RCR 0.02

Worker - dermal, long-term - systemic: Exposure 1.37 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.01

PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

Worker - inhalation, long-term - systemic: Exposure 16.53 mg/m³, DNEL 275 mg/m³, RCR 0.06

PROC4 Chemical production where opportunity for exposure arises

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.04

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.09

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.04

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

PROC15 Use as laboratory reagent.

Worker - inhalation, long-term - systemic: Exposure 0.06 mg/m³, DNEL 275 mg/m³, RCR <0.01

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

4. Guidance to check compliance with the exposure scenario (Health 1)

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Exposure scenario

Formulation and (re)packing of substances and mixtures

Identification

Product name	1-METHOXY-2-PROPYL ACETATE
REACH registration number	01-2119475791-29-XXXX
CAS number	108-65-6
EC number	203-603-9
EU index number	607-195-00-7
Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com

1. Title of exposure scenario

Main title	Formulation and (re)packing of substances and mixtures
Process scope	Formulation, packing and re-packing of the substance and its mixtures in batch or continuous operations, including storage, materials transfers, mixing, tableting, compression, pelletisation, extrusion, large and small scale packing, sampling, maintenance and associated laboratory activities.
Main sector	SU3 Industrial uses
<u>Environment</u>	
Environmental release category	ERC2 Formulation into mixture
SPERC	CEPE SPERC 2.1b.v1
<u>Worker</u>	

Formulation and (re)packing of substances and mixtures

Process category	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4 Chemical production where opportunity for exposure arises PROC5 Mixing or blending in batch processes PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing) PROC14 Tableting, compression, extrusion, pelletisation, granulation PROC15 Use as laboratory reagent.
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2. Conditions of use affecting exposure (Industrial - Environment 1)

Product characteristics

Physical state	Liquid
Concentration details	Covers concentrations up to 100 %.

Amounts used

Daily amount per site: 2100 kg

Frequency and duration of use

Emission days: 225 days/year

Environmental factors not influenced by risk management measures

Dilution	Local freshwater dilution factor: 10 Local marine water dilution factor: 100
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Risk management measures

Good practice	Site should have a spill plan to ensure that adequate safeguards are in place to minimise the impact of episodic releases.
STP details	Estimated substance removal from wastewater via domestic sewage treatment: 87.3% Total efficiency of removal from wastewater after onsite and offsite (domestic treatment plant) RMMs: 87.3%

Conditions and measures related to external treatment of waste for disposal

Disposal method	Contain and dispose of waste according to local regulations.
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Conditions and measures related to external recovery of waste

Recovery method	Use vapour recovery units when necessary.
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2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid
Concentration details	Covers concentrations up to 100 %.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Formulation and (re)packing of substances and mixtures

Other given operational conditions affecting workers exposure

Setting	Indoor use.
Temperature	Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Technical conditions and measures at process level (source) to prevent release

Technical protective measures	Control any potential exposure using measures such as contained or enclosed systems, properly designed and maintained facilities and a good standard of general ventilation. Drain down systems and clear transfer lines prior to breaking containment. Drain down and flush equipment where possible prior to maintenance. Where there is potential for exposure: Ensure relevant staff are informed of the nature of exposure and aware of basic actions to minimise exposures; Ensure suitable personal protective equipment is available; Clear up spills and dispose of waste in accordance with regulatory requirements; monitor effectiveness of control measures; consider the need for health surveillance; identify and implement corrective actions.
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Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures	Assumes a good basic standard of occupational hygiene is implemented.
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Risk management measures

Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contamination immediately. Provide basic employee training to prevent/minimise exposures and to report any skin problems that may develop. Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).

3. Exposure estimation (Environment 1)

Assessment method	Used ECETOC TRA model.
Environmental exposure	Fresh water: Exposure 0.0022 mg/l, PNEC 0.635 mg/l, RCR 0.004 freshwater sediment: Exposure 0.011 mg/kg, PNEC 3.29 mg/kg, RCR 0.004 Marine water: Exposure 0.0004 mg/l, PNEC 0.0635 mg/l, RCR 0.0006 marine sediment: Exposure 0.00202 mg/kg, PNEC 0.329 mg/kg, RCR 0.006 Soil: Exposure 0.0027 mg/kg, PNEC 0.29 mg/kg, RCR 0.010

4. Guidance to check compliance with the exposure scenario (Environment 1)

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. Further details on scaling and control technologies are provided in SpERC factsheet (<http://cefic.org/en/reach-for-industries-libraries.html>).

3. Exposure estimation (Health 1)

Assessment method	The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated
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Formulation and (re)packing of substances and mixtures

Exposure

PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

Worker - inhalation, long-term - systemic: Exposure 0.06 mg/m³, DNEL 275 mg/m³, RCR <0.01

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

Worker - inhalation, long-term - systemic: Exposure 5.51 mg/m³, DNEL 275 mg/m³, RCR 0.02

Worker - dermal, long-term - systemic: Exposure 1.37 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.01

PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

Worker - inhalation, long-term - systemic: Exposure 137.71 mg/m³, DNEL 275 mg/m³, RCR 0.50

PROC4 Chemical production where opportunity for exposure arises

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.04

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

PROC5 Mixing or blending in batch processes

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.09

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.09

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.04

PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.04

PROC14 Tabletting, compression, extrusion, pelletisation, granulation

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

Worker - dermal, long-term - systemic: Exposure 3.43 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.02

PROC15 Use as laboratory reagent.

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

Formulation and (re)packing of substances and mixtures

4. Guidance to check compliance with the exposure scenario (Health 1)

Estimated workplace exposures are not expected to exceed DNELs when the identified risk management measures are adopted. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Exposure scenario

Industrial use in coatings (solvent based; general) 1

Identification

Product name	1-METHOXY-2-PROPYL ACETATE
REACH registration number	01-2119475791-29-XXXX
CAS number	108-65-6
EC number	203-603-9
EU index number	607-195-00-7
Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com

1. Title of exposure scenario

Main title	Industrial use in coatings (solvent based; general) 1
Process scope	Covers the use in coatings (paints, inks, adhesives, etc.), including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, brush, spreader by hand or similar methods and film formation) and equipment cleaning, maintenance and associated laboratory activities.
Main sector	SU3 Industrial uses
<u>Environment</u>	
Environmental release category	ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
<u>Worker</u>	

Industrial use in coatings (solvent based; general) 1

Process category	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
	PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
	PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
	PROC4 Chemical production where opportunity for exposure arises
	PROC5 Mixing or blending in batch processes
	PROC7 Industrial spraying
	PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
	PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities
	PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)
	PROC10 Roller application or brushing
	PROC13 Treatment of articles by dipping and pouring.
	PROC14 Tableting, compression, extrusion, pelletisation, granulation
	PROC15 Use as laboratory reagent.

2. Conditions of use affecting exposure (Industrial - Environment 1)

Product characteristics

Physical state	Liquid
Concentration details	Covers concentrations up to 100 %.

Amounts used

Maximum daily site tonnage: 36000 kg

Frequency and duration of use

Emission days: 300 days/year

Environmental factors not influenced by risk management measures

Dilution	Local freshwater dilution factor: 10
	Local marine water dilution factor: 100

Risk management measures

Good practice	Site should have a spill plan to ensure that adequate safeguards are in place to minimise the impact of episodic releases.
STP details	Estimated substance removal from wastewater via domestic sewage treatment: 87.3% Total efficiency of removal from wastewater after onsite and offsite (domestic treatment plant) RMMS: 87.3%

Conditions and measures related to external treatment of waste for disposal

Disposal method	Contain and dispose of waste according to local regulations.
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Conditions and measures related to external recovery of waste

Recovery method	Use vapour recovery units when necessary.
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2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid
Concentration details	Covers concentrations up to 100 %.

Industrial use in coatings (solvent based; general) 1

Amounts used

Not relevant.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Other given operational conditions affecting workers exposure

Setting Indoor use.

Temperature Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Assumes a good basic standard of occupational hygiene is implemented.

Risk management measures

Carry out in a vented booth or extracted enclosure.

Wear a respirator conforming to EN140 with Type A/P2 filter or better.

3. Exposure estimation (Environment 1)

Assessment method Used ECETOC TRA model.

Environmental exposure Fresh water: Exposure 0.002 mg/l, PNEC 0.635 mg/l, RCR 0.003
freshwater sediment: Exposure 0.012 mg/kg, PNEC 3.29 mg/kg, RCR 0.004
Marine water: Exposure 0.0004 mg/l, PNEC 0.0635 mg/l, RCR 0.0006
marine sediment: Exposure 0.002 mg/kg, PNEC 0.329 mg/kg, RCR 0.006
Soil: Exposure 0.0024 mg/kg, PNEC 0.29 mg/kg, RCR 0.008

4. Guidance to check compliance with the exposure scenario (Environment 1)

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. Further details on scaling and control technologies are provided in SpERC factsheet (<http://cefic.org/en/reach-for-industries-libraries.html>).

3. Exposure estimation (Health 1)

Assessment method The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated

Industrial use in coatings (solvent based; general) 1

Exposure

PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

Worker - inhalation, long-term - systemic: Exposure 0.06 mg/m³, DNEL 275 mg/m³, RCR <0.01

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

Worker - dermal, long-term - systemic: Exposure 1.37 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.01

PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

Worker - inhalation, long-term - systemic: Exposure 16.53 mg/m³, DNEL 275 mg/m³, RCR 0.06

PROC4 Chemical production where opportunity for exposure arises

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.04

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

PROC5 Mixing or blending in batch processes

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.09

PROC7 Industrial spraying

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

Worker - dermal, long-term - systemic: Exposure 42.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.28

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.09

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.04

PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.04

PROC10 Roller application or brushing

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

Worker - dermal, long-term - systemic: Exposure 27.43 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.09

Industrial use in coatings (solvent based; general) 1

PROC13 Treatment of articles by dipping and pouring.

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.09

PROC14 Tableting, compression, extrusion, pelletisation, granulation

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

Worker - dermal, long-term - systemic: Exposure 3.43 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.02

PROC15 Use as laboratory reagent.

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

4. Guidance to check compliance with the exposure scenario (Health 1)

Estimated workplace exposures are not expected to exceed DNELs when the identified risk management measures are adopted. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Exposure scenario

Professional use in coatings (solvent based)

Identification

Product name	1-METHOXY-2-PROPYL ACETATE
REACH registration number	01-2119475791-29-XXXX
CAS number	108-65-6
EC number	203-603-9
EU index number	607-195-00-7
Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com

1. Title of exposure scenario

Main title	Professional use in coatings (solvent based)
Process scope	Covers the use in coatings (paints, inks, adhesives, etc.), including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, brush, spreader by hand or similar methods and film formation) and equipment cleaning, maintenance and associated laboratory activities.
Main sector	SU22 Professional uses
<u>Environment</u>	
Environmental release category	ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
SPERC	ESVOC SPERC 8.3b.v1
<u>Worker</u>	

Professional use in coatings (solvent based)

Process category	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
	PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
	PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
	PROC4 Chemical production where opportunity for exposure arises
	PROC5 Mixing or blending in batch processes
	PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
	PROC8b Transfer of substance or mixture (charging and discharging) 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 Manual activities involving hand contact

2. Conditions of use affecting exposure (Industrial - Environment 1)

Product characteristics

Physical state	Liquid
Concentration details	Covers concentrations up to 100 %.

Amounts used

Maximum daily site tonnage: 5000 kg

Frequency and duration of use

Emission days: 365 days/year

Environmental factors not influenced by risk management measures

Dilution	Local freshwater dilution factor: 10
	Local marine water dilution factor: 100

Risk management measures

Good practice	Site should have a spill plan to ensure that adequate safeguards are in place to minimise the impact of episodic releases.
STP details	Estimated substance removal from wastewater via domestic sewage treatment: 87.3% Total efficiency of removal from wastewater after onsite and offsite (domestic treatment plant) RMMS: 87.3%

Conditions and measures related to external treatment of waste for disposal

Disposal method	Contain and dispose of waste according to local regulations.
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Conditions and measures related to external recovery of waste

Recovery method	Use vapour recovery units when necessary.
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2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid
Concentration details	Covers concentrations up to 100 %.

Amounts used

Not relevant.

Professional use in coatings (solvent based)

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Other given operational conditions affecting workers exposure

Temperature Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Assumes a good basic standard of occupational hygiene is implemented.

Risk management measures

Carry out in a vented booth or extracted enclosure.

Wear a respirator conforming to EN140 with Type A/P2 filter or better.

3. Exposure estimation (Environment 1)

Assessment method Used ECETOC TRA model.

Environmental exposure Fresh water: Exposure 0.003 mg/l, PNEC 0.635 mg/l, RCR 0.004
freshwater sediment: Exposure 0.014 mg/kg, PNEC 3.29 mg/kg, RCR 0.004
Marine water: Exposure 0.0004 mg/l, PNEC 0.0635 mg/l, RCR 0.007
marine sediment: Exposure 0.002 mg/kg, PNEC 0.329 mg/kg, RCR 0.007
Soil: Exposure 0.001 mg/kg, PNEC 0.29 mg/kg, RCR 0.004

4. Guidance to check compliance with the exposure scenario (Environment 1)

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. Further details on scaling and control technologies are provided in SpERC factsheet (<http://cefic.org/en/reach-for-industries-libraries.html>).

3. Exposure estimation (Health 1)

Assessment method The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated

Professional use in coatings (solvent based)

Exposure

PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

Worker - inhalation, long-term - systemic: Exposure 0.06 mg/m³, DNEL 275 mg/m³, RCR <0.01

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

Worker - dermal, long-term - systemic: Exposure 1.37 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.01

PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

Worker - inhalation, long-term - systemic: Exposure 16.53 mg/m³, DNEL 275 mg/m³, RCR 0.06

PROC4 Chemical production where opportunity for exposure arises

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.04

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

PROC5 Mixing or blending in batch processes

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.09

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.09

Worker - inhalation, long-term - systemic: Exposure 137.71 mg/m³, DNEL 275 mg/m³, RCR 0.50

PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.04

PROC10 Roller application or brushing

Worker - inhalation, long-term - systemic: Exposure 137.71 mg/m³, DNEL 275 mg/m³, RCR 0.50

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.18

PROC11 Non industrial spraying

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

Worker - dermal, long-term - systemic: Exposure 107.14 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.70

PROC13 Treatment of articles by dipping and pouring.

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.09

PROC15 Use as laboratory reagent.

Professional use in coatings (solvent based)

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

PROC19 Manual activities involving hand contact

Worker - inhalation, long-term - systemic: Exposure 137.71 mg/m³, DNEL 275 mg/m³, RCR 0.50

Worker - dermal, long-term - systemic: Exposure 28.29 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.18

4. Guidance to check compliance with the exposure scenario (Health 1)

Estimated workplace exposures are not expected to exceed DNELs when the identified risk management measures are adopted. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Exposure scenario Industrial use in cleaning agents

Identification

Product name	1-METHOXY-2-PROPYL ACETATE
REACH registration number	01-2119475791-29-XXXX
CAS number	108-65-6
EC number	203-603-9
EU index number	607-195-00-7
Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com

1. Title of exposure scenario

Main title	Industrial use in cleaning agents
Process scope	Covers the use as a component of cleaning products, including transfer from storage, pouring/unloading from drums or containers and exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping, automated and by hand), related equipment cleaning and maintenance.
Main sector	SU3 Industrial uses
<u>Environment</u>	
Environmental release category	ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
SPERC	ESVOC SPERC 4.4a.v1
<u>Worker</u>	

Industrial use in cleaning agents

Process category	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
	PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
	PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
	PROC4 Chemical production where opportunity for exposure arises
	PROC7 Industrial spraying
	PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
	PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities
	PROC10 Roller application or brushing
	PROC13 Treatment of articles by dipping and pouring.

2. Conditions of use affecting exposure (Industrial - Environment 1)

Product characteristics

Physical state	Liquid
Concentration details	Covers concentrations up to 100 %.

Amounts used

Maximum daily site tonnage: 5000 kg

Frequency and duration of use

Emission days: 20 days/year

Environmental factors not influenced by risk management measures

Dilution	Local freshwater dilution factor: 10
	Local marine water dilution factor: 100

Risk management measures

Good practice	Site should have a spill plan to ensure that adequate safeguards are in place to minimise the impact of episodic releases.
STP details	Estimated substance removal from wastewater via domestic sewage treatment: 87.3% Total efficiency of removal from wastewater after onsite and offsite (domestic treatment plant) RMMS: 87.3%

Conditions and measures related to external treatment of waste for disposal

Disposal method	Contain and dispose of waste according to local regulations.
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Conditions and measures related to external recovery of waste

Recovery method	Use vapour recovery units when necessary.
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2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid
Concentration details	Covers concentrations up to 100 %.

Amounts used

Not relevant.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Industrial use in cleaning agents

Other given operational conditions affecting workers exposure

Temperature Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Assumes a good basic standard of occupational hygiene is implemented.

Risk management measures

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).
Avoid carrying out activities involving exposure for more than 4 hours.
Wear suitable gloves tested to EN374.

3. Exposure estimation (Environment 1)

Assessment method Used ECETOC TRA model.

Environmental exposure Fresh water: Exposure 0.0024 mg/l, PNEC 0.635 mg/l, RCR 0.009
freshwater sediment: Exposure 0.0277 mg/kg, PNEC 3.29 mg/kg, RCR 0.009
Marine water: Exposure 0.0004 mg/l, PNEC 0.0635 mg/l, RCR 0.011
marine sediment: Exposure 0.0037 mg/kg, PNEC 0.329 mg/kg, RCR 0.011
Soil: Exposure 0.001 mg/kg, PNEC 0.29 mg/kg, RCR 0.004

4. Guidance to check compliance with the exposure scenario (Environment 1)

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. Further details on scaling and control technologies are provided in SpERC factsheet (<http://cefic.org/en/reach-for-industries-libraries.html>).

3. Exposure estimation (Health 1)

Assessment method The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated

Industrial use in cleaning agents

Exposure

PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

Worker - inhalation, long-term - systemic: Exposure 0.06 mg/m³, DNEL 275 mg/m³, RCR <0.01

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

Worker - inhalation, long-term - systemic: Exposure 5.51 mg/m³, DNEL 275 mg/m³, RCR 0.02

Worker - dermal, long-term - systemic: Exposure 1.37 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.01

PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

Worker - inhalation, long-term - systemic: Exposure 16.53 mg/m³, DNEL 275 mg/m³, RCR 0.06

PROC4 Chemical production where opportunity for exposure arises

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.04

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

PROC7 Industrial spraying

Worker - inhalation, long-term - systemic: Exposure 231.35 mg/m³, DNEL 275 mg/m³, RCR 0.84

Worker - dermal, long-term - systemic: Exposure 8.57 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.06

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.09

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.04

PROC10 Roller application or brushing

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

Worker - dermal, long-term - systemic: Exposure 27.43 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.09

PROC13 Treatment of articles by dipping and pouring.

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.09

4. Guidance to check compliance with the exposure scenario (Health 1)

Estimated workplace exposures are not expected to exceed DNELs when the identified risk management measures are adopted. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Exposure scenario

Professional use in cleaning agents

Identification

Product name	1-METHOXY-2-PROPYL ACETATE
REACH registration number	01-2119475791-29-XXXX
CAS number	108-65-6
EC number	203-603-9
EU index number	607-195-00-7
Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com

1. Title of exposure scenario

Main title	Professional use in cleaning agents
Process scope	Covers the use as a component of cleaning products, including pouring/unloading from drums or containers and exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping, automated and by hand).
Main sector	SU22 Professional uses
<u>Environment</u>	
Environmental release category	ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
SPERC	ESVOC SPERC 8.4b.v1
<u>Worker</u>	

Professional use in cleaning agents

Process category	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
	PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
	PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
	PROC4 Chemical production where opportunity for exposure arises
	PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
	PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities
	PROC10 Roller application or brushing
	PROC11 Non industrial spraying
	PROC13 Treatment of articles by dipping and pouring.

2. Conditions of use affecting exposure (Industrial - Environment 1)

Product characteristics

Physical state	Liquid
Concentration details	Covers concentrations up to 100 %.

Amounts used

Maximum daily site tonnage: 5000 kg

Frequency and duration of use

Emission days: 365 days/year

Environmental factors not influenced by risk management measures

Dilution	Local freshwater dilution factor: 10
	Local marine water dilution factor: 100

Risk management measures

Good practice	Site should have a spill plan to ensure that adequate safeguards are in place to minimise the impact of episodic releases.
STP details	Estimated substance removal from wastewater via domestic sewage treatment: 87.3% Total efficiency of removal from wastewater after onsite and offsite (domestic treatment plant) RMMS: 87.3%

Conditions and measures related to external treatment of waste for disposal

Disposal method	Contain and dispose of waste according to local regulations.
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Conditions and measures related to external recovery of waste

Recovery method	Use vapour recovery units when necessary.
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2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid
Concentration details	Covers concentrations up to 100 %.

Amounts used

Not relevant.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Professional use in cleaning agents

Other given operational conditions affecting workers exposure

Temperature Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Assumes a good basic standard of occupational hygiene is implemented.

Risk management measures

Provide a good standard of controlled ventilation (10 to 15 air changes per hour).

Limit the substance content in the product to 25%.

Wear suitable gloves tested to EN374.

3. Exposure estimation (Environment 1)

Assessment method Used ECETOC TRA model.

Environmental exposure Fresh water: Exposure 0.0022 mg/l, PNEC 0.635 mg/l, RCR 0.004
freshwater sediment: Exposure 0.0114 mg/kg, PNEC 3.29 mg/kg, RCR 0.004
Marine water: Exposure 0.0004 mg/l, PNEC 0.0635 mg/l, RCR 0.006
marine sediment: Exposure 0.002 mg/kg, PNEC 0.329 mg/kg, RCR 0.007
Soil: Exposure 0.001 mg/kg, PNEC 0.29 mg/kg, RCR 0.003

4. Guidance to check compliance with the exposure scenario (Environment 1)

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. Further details on scaling and control technologies are provided in SpERC factsheet (<http://cefic.org/en/reach-for-industries-libraries.html>).

3. Exposure estimation (Health 1)

Assessment method The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated

Professional use in cleaning agents

Exposure

PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

Worker - inhalation, long-term - systemic: Exposure 0.06 mg/m³, DNEL 275 mg/m³, RCR <0.01

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

Worker - dermal, long-term - systemic: Exposure 1.37 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.01

PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

Worker - inhalation, long-term - systemic: Exposure 16.53 mg/m³, DNEL 275 mg/m³, RCR 0.06

PROC4 Chemical production where opportunity for exposure arises

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.04

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.09

Worker - inhalation, long-term - systemic: Exposure 96.40 mg/m³, DNEL 275 mg/m³, RCR 0.35

PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.04

PROC10 Roller application or brushing

Worker - inhalation, long-term - systemic: Exposure 137.71 mg/m³, DNEL 275 mg/m³, RCR 0.50

Worker - dermal, long-term - systemic: Exposure 27.43 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.18

PROC11 Non industrial spraying

Worker - inhalation, long-term - systemic: Exposure 231.35 mg/m³, DNEL 275 mg/m³, RCR 0.84

Worker - dermal, long-term - systemic: Exposure 21.43 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.7014

PROC13 Treatment of articles by dipping and pouring.

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

Worker - dermal, long-term - systemic: Exposure 27.43 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.18

4. Guidance to check compliance with the exposure scenario (Health 1)

Professional use in cleaning agents

Estimated workplace exposures are not expected to exceed DNELs when the identified risk management measures are adopted. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Exposure scenario

Professional use in Agrochemicals

Identification

Product name	1-METHOXY-2-PROPYL ACETATE
REACH registration number	01-2119475791-29-XXXX
CAS number	108-65-6
EC number	203-603-9
EU index number	607-195-00-7
Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com

1. Title of exposure scenario

Main title	Professional use in Agrochemicals
Process scope	Use as an agrochemical excipient for application by manual or machine spraying, smokes and fogging, including equipment clean-downs and disposal.
Main sector	SU22 Professional uses
<u>Environment</u>	
Environmental release category	ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
SPERC	ECPA SPERC 8d.2.v1
<u>Worker</u>	
Process category	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC4 Chemical production where opportunity for exposure arises PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC11 Non industrial spraying PROC15 Use as laboratory reagent.

2. Conditions of use affecting exposure (Industrial - Environment 1)

Professional use in Agrochemicals

Product characteristics

Physical state	Liquid
Concentration details	Covers concentrations up to 25 %.

Amounts used

Daily amount per site: 410 kg

Frequency and duration of use

Emission days: 365 days/year

Environmental factors not influenced by risk management measures

Dilution	Local freshwater dilution factor: 10 Local marine water dilution factor: 100
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Conditions and measures related to external recovery of waste

Recovery method	Use vapour recovery units when necessary.
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2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid
Concentration details	Covers concentrations up to 25 %.

Amounts used

Not relevant.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Other given operational conditions affecting workers exposure

Temperature	Assumes use at not more than 20°C above ambient temperature, unless stated differently.
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Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures	Assumes a good basic standard of occupational hygiene is implemented.
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Risk management measures

Ensure operation is undertaken outdoors.
Wear suitable gloves tested to EN374.

3. Exposure estimation (Environment 1)

Assessment method	Used ECETOC TRA model.
Environmental exposure	Fresh water: Exposure 0.0022 mg/l, PNEC 0.635 mg/l, RCR 0.004 freshwater sediment: Exposure 0.011 mg/kg, PNEC 3.29 mg/kg, RCR 0.004 Marine water: Exposure 0.00034 mg/l, PNEC 0.0635 mg/l, RCR 0.006 marine sediment: Exposure 0.002 mg/kg, PNEC 0.329 mg/kg, RCR 0.006 Soil: Exposure 0.001 mg/kg, PNEC 0.29 mg/kg, RCR 0.003

4. Guidance to check compliance with the exposure scenario (Environment 1)

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. Further details on scaling and control technologies are provided in SpERC factsheet (<http://cefic.org/en/reach-for-industries-libraries.html>).

Professional use in Agrochemicals

3. Exposure estimation (Health 1)

Assessment method	The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated
Exposure	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions Worker - inhalation, long-term - systemic: Exposure 0.06 mg/m³, DNEL 275 mg/m³, RCR <0.01 Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01 PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions Worker - inhalation, long-term - systemic: Exposure 16.53 mg/m³, DNEL 275 mg/m³, RCR 0.20 Worker - dermal, long-term - systemic: Exposure 1.37 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.01 PROC4 Chemical production where opportunity for exposure arises Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.04 Worker - inhalation, long-term - systemic: Exposure 33.05 mg/m³, DNEL 275 mg/m³, RCR 0.36 PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.09 Worker - inhalation, long-term - systemic: Exposure 82.63 mg/m³, DNEL 275 mg/m³, RCR 0.43 PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities Worker - inhalation, long-term - systemic: Exposure 33.05 mg/m³, DNEL 275 mg/m³, RCR 0.31 Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.14 PROC11 Non industrial spraying Worker - inhalation, long-term - systemic: Exposure 231.35 mg/m³, DNEL 275 mg/m³, RCR 0.84 Worker - dermal, long-term - systemic: Exposure 21.43 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.7014 PROC13 Treatment of articles by dipping and pouring. Worker - inhalation, long-term - systemic: Exposure 33.05 mg/m³, DNEL 275 mg/m³, RCR 0.31 Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.27

4. Guidance to check compliance with the exposure scenario (Health 1)

Estimated workplace exposures are not expected to exceed DNELs when the identified risk management measures are adopted. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Exposure scenario Industrial use in coil coatings

Identification

Product name	1-METHOXY-2-PROPYL ACETATE
REACH registration number	01-2119475791-29-XXXX
CAS number	108-65-6
EC number	203-603-9
EU index number	607-195-00-7
Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com

1. Title of exposure scenario

Main title	Industrial use in coil coatings
Process scope	Covers the use in coatings (paints, inks, adhesives, etc.), including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, brush, spreader by hand or similar methods and film formation) and equipment cleaning, maintenance and associated laboratory activities.
Main sector	SU3 Industrial uses
<u>Environment</u>	
Environmental release category	ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
<u>Worker</u>	

Industrial use in coil coatings

Process category	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
	PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
	PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
	PROC4 Chemical production where opportunity for exposure arises
	PROC5 Mixing or blending in batch processes
	PROC7 Industrial spraying
	PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
	PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities
	PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)
	PROC10 Roller application or brushing
	PROC13 Treatment of articles by dipping and pouring.
	PROC15 Use as laboratory reagent.

2. Conditions of use affecting exposure (Industrial - Environment 1)

Product characteristics

Physical state	Liquid
Concentration details	Covers concentrations up to 100 %.

Amounts used

Maximum daily site tonnage: 5400 kg

Frequency and duration of use

Emission days: 220 days/year

Environmental factors not influenced by risk management measures

Dilution	Local freshwater dilution factor: 10
	Local marine water dilution factor: 100

Risk management measures

Good practice	Site should have a spill plan to ensure that adequate safeguards are in place to minimise the impact of episodic releases.
STP details	Estimated substance removal from wastewater via domestic sewage treatment: 87.3% Total efficiency of removal from wastewater after onsite and offsite (domestic treatment plant) RMMS: 87.3%

Conditions and measures related to external treatment of waste for disposal

Disposal method	Contain and dispose of waste according to local regulations.
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Conditions and measures related to external recovery of waste

Recovery method	Use vapour recovery units when necessary.
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2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid
Concentration details	Covers concentrations up to 100 %.

Amounts used

Industrial use in coil coatings

Not relevant.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Other given operational conditions affecting workers exposure

Setting Indoor use.

Temperature Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Assumes a good basic standard of occupational hygiene is implemented.

Risk management measures

Carry out in a vented booth or extracted enclosure.

Wear a respirator conforming to EN140 with Type A/P2 filter or better.

3. Exposure estimation (Environment 1)

Assessment method Used ECETOC TRA model.

Environmental exposure Fresh water: Exposure 0.002 mg/l, PNEC 0.635 mg/l, RCR 0.004
freshwater sediment: Exposure 0.011 mg/kg, PNEC 3.29 mg/kg, RCR 0.004
Marine water: Exposure 0.0004 mg/l, PNEC 0.0635 mg/l, RCR 0.0006
marine sediment: Exposure 0.002 mg/kg, PNEC 0.329 mg/kg, RCR 0.006
Soil: Exposure 0.002 mg/kg, PNEC 0.29 mg/kg, RCR 0.007

4. Guidance to check compliance with the exposure scenario (Environment 1)

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. Further details on scaling and control technologies are provided in SpERC factsheet (<http://cefic.org/en/reach-for-industries-libraries.html>).

3. Exposure estimation (Health 1)

Assessment method The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated

Industrial use in coil coatings

Exposure

PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

Worker - inhalation, long-term - systemic: Exposure 0.06 mg/m³, DNEL 275 mg/m³, RCR <0.01

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

Worker - dermal, long-term - systemic: Exposure 1.37 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.01

PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

Worker - inhalation, long-term - systemic: Exposure 16.53 mg/m³, DNEL 275 mg/m³, RCR 0.06

PROC4 Chemical production where opportunity for exposure arises

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.04

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

PROC5 Mixing or blending in batch processes

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.09

PROC7 Industrial spraying

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

Worker - dermal, long-term - systemic: Exposure 42.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.28

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.09

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.04

PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.04

PROC10 Roller application or brushing

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

Worker - dermal, long-term - systemic: Exposure 27.43 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.09

Industrial use in coil coatings

PROC13 Treatment of articles by dipping and pouring.

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.09

PROC15 Use as laboratory reagent.

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

4. Guidance to check compliance with the exposure scenario (Health 1)

Estimated workplace exposures are not expected to exceed DNELs when the identified risk management measures are adopted. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Exposure scenario

Industrial use in coatings (solvent based; general) 2

Identification

Product name	1-METHOXY-2-PROPYL ACETATE
REACH registration number	01-2119475791-29-XXXX
CAS number	108-65-6
EC number	203-603-9
EU index number	607-195-00-7
Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com

1. Title of exposure scenario

Main title	Industrial use in coatings (solvent based; general) 2
Process scope	Covers the use in coatings (paints, inks, adhesives, etc.), including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, brush, spreader by hand or similar methods and film formation) and equipment cleaning, maintenance and associated laboratory activities.
Main sector	SU3 Industrial uses
<u>Environment</u>	
Environmental release category	ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
<u>Worker</u>	

Industrial use in coatings (solvent based; general) 2

Process category	PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
	PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
	PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
	PROC4 Chemical production where opportunity for exposure arises
	PROC5 Mixing or blending in batch processes
	PROC7 Industrial spraying
	PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
	PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities
	PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)
	PROC10 Roller application or brushing
	PROC13 Treatment of articles by dipping and pouring.
	PROC15 Use as laboratory reagent.

2. Conditions of use affecting exposure (Industrial - Environment 1)

Product characteristics

Physical state	Liquid
Concentration details	Covers concentrations up to 100 %.

Amounts used

Maximum daily site tonnage: 1100 kg

Frequency and duration of use

Emission days: 300 days/year

Environmental factors not influenced by risk management measures

Dilution	Local freshwater dilution factor: 10
	Local marine water dilution factor: 100

Risk management measures

Good practice	Site should have a spill plan to ensure that adequate safeguards are in place to minimise the impact of episodic releases.
STP details	Estimated substance removal from wastewater via domestic sewage treatment: 87.3% Total efficiency of removal from wastewater after onsite and offsite (domestic treatment plant) RMMS: 87.3%

Conditions and measures related to external treatment of waste for disposal

Disposal method	Contain and dispose of waste according to local regulations.
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Conditions and measures related to external recovery of waste

Recovery method	Use vapour recovery units when necessary.
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2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Physical state	Liquid
Concentration details	Covers concentrations up to 100 %.

Amounts used

Industrial use in coatings (solvent based; general) 2

Not relevant.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).

Other given operational conditions affecting workers exposure

Setting Indoor use.

Temperature Assumes use at not more than 20°C above ambient temperature, unless stated differently.

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Assumes a good basic standard of occupational hygiene is implemented.

Risk management measures

Carry out in a vented booth or extracted enclosure.

Wear a respirator conforming to EN140 with Type A/P2 filter or better.

3. Exposure estimation (Environment 1)

Assessment method Used ECETOC TRA model.

Environmental exposure Fresh water: Exposure 0.116 mg/l, PNEC 0.635 mg/l, RCR 0.222
freshwater sediment: Exposure 0.731 mg/kg, PNEC 3.29 mg/kg, RCR 0.221
Marine water: Exposure 0.012 mg/l, PNEC 0.0635 mg/l, RCR 0.225
marine sediment: Exposure 0.074 mg/kg, PNEC 0.329 mg/kg, RCR 0.225
Soil: Exposure 0.006 mg/kg, PNEC 0.29 mg/kg, RCR 0.020

4. Guidance to check compliance with the exposure scenario (Environment 1)

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. Further details on scaling and control technologies are provided in SpERC factsheet (<http://cefic.org/en/reach-for-industries-libraries.html>).

3. Exposure estimation (Health 1)

Assessment method The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated

Industrial use in coatings (solvent based; general) 2

Exposure

PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

Worker - inhalation, long-term - systemic: Exposure 0.06 mg/m³, DNEL 275 mg/m³, RCR <0.01

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

Worker - dermal, long-term - systemic: Exposure 1.37 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.01

PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

Worker - inhalation, long-term - systemic: Exposure 16.53 mg/m³, DNEL 275 mg/m³, RCR 0.06

PROC4 Chemical production where opportunity for exposure arises

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.04

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

PROC5 Mixing or blending in batch processes

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.09

PROC7 Industrial spraying

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

Worker - dermal, long-term - systemic: Exposure 42.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.28

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.09

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.04

PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

Worker - dermal, long-term - systemic: Exposure 6.86 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.04

PROC10 Roller application or brushing

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

Worker - dermal, long-term - systemic: Exposure 27.43 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.09

Industrial use in coatings (solvent based; general) 2

PROC13 Treatment of articles by dipping and pouring.

Worker - inhalation, long-term - systemic: Exposure 55.08 mg/m³, DNEL 275 mg/m³, RCR 0.20

Worker - dermal, long-term - systemic: Exposure 13.71 mg/kg/day, DNEL 796 mg/kg/day, RCR 0.09

PROC15 Use as laboratory reagent.

Worker - inhalation, long-term - systemic: Exposure 27.54 mg/m³, DNEL 275 mg/m³, RCR 0.10

Worker - dermal, long-term - systemic: Exposure 0.34 mg/kg/day, DNEL 796 mg/kg/day, RCR <0.01

4. Guidance to check compliance with the exposure scenario (Health 1)

Estimated workplace exposures are not expected to exceed DNELs when the identified risk management measures are adopted. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Exposure scenario Consumer use in coatings

Identification

Product name	1-METHOXY-2-PROPYL ACETATE
REACH registration number	01-2119475791-29-XXXX
CAS number	108-65-6
EC number	203-603-9
EU index number	607-195-00-7
Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com

1. Title of exposure scenario

Main title	Consumer use in coatings
Process scope	Covers the use in coatings (paints, inks, adhesives, etc.), including exposures during use (including product transfer and preparation, application by brush, spray by hand or similar methods) and equipment cleaning.
Product category	PC9a Coatings and paints, thinners, paint removers. PC18 Ink and toners.
Main sector	SU21 Consumer uses
<u>Environment</u>	
Environmental release category	ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
SPERC	ESVOC SPERC 8.3b.v1

2. Conditions of use affecting exposure (Non-industrial - Environment 1)

Product characteristics

Physical state	Liquid
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Frequency and duration of use

Emission days: 365 days/year

Environmental factors not influenced by risk management measures

Consumer use in coatings

Dilution Local freshwater dilution factor: 10
Local marine water dilution factor: 100

Risk management measures

STP type Municipal STP.

STP details Estimated substance removal from wastewater via domestic sewage treatment: 87.3%

Conditions and measures related to external treatment of waste for disposal

Disposal method Contain and dispose of waste according to local regulations.

2. Conditions of use affecting exposure (Non-industrial - Health 1)

Product characteristics

Physical state Volatile Liquid

Concentration details PC9a Coatings and paints, thinners, paint removers. Concentration of substance in product: 10%
PC18 Ink and toners. Concentration of substance in product: 45%

Amounts used

PC9a Coatings and paints, thinners, paint removers.
Amount per use: 1000 g
PC18 Ink and toners.
Amount per use: 40 g

Frequency and duration of use

PC9a Coatings and paints, thinners, paint removers.
Covers daily exposure up to 2.2hours
PC18 Ink and toners.
Covers frequency up to 0.5 hours/day, 1 days/year, .

Other given operational conditions affecting Non-industrial exposure

Temperature Assumes activities are at room temperature.

Room size 20 m³

Ventilation rate Covers use under typical household ventilation. Unless otherwise stated. PC9a Coatings and paints, thinners, paint removers. Open windows during application to ensure natural ventilation.

Other given operational conditions affecting Non-industrial exposure

No specific risk management measure identified beyond those operational conditions stated.

3. Exposure estimation (Environment 1)

Assessment method Used ECETOC TRA model.

Environmental exposure Fresh water: Exposure 0.0023 mg/l, PNEC 0.635 mg/l, RCR 0.004
freshwater sediment: Exposure 0.0116 mg/kg, PNEC 3.29 mg/kg, RCR 0.004
Marine water: Exposure 0.0004 mg/l, PNEC 0.0635 mg/l, RCR 0.0007
marine sediment: Exposure 0.0021 mg/kg, PNEC 0.329 mg/kg, RCR 0.007
Soil: Exposure 0.001 mg/kg, PNEC 0.29 mg/kg, RCR 0.003

4. Guidance to check compliance with the exposure scenario (Environment 1)

Consumer use in coatings

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. Further details on scaling and control technologies are provided in SpERC factsheet (<http://cefic.org/en/reach-for-industries-libraries.html>).

3. Exposure estimation (Health 1)

Assessment method	The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated
Exposure	PC9a Coatings and paints, thinners, paint removers. Consumer - inhalation, long-term - systemic: Exposure 6.83 mg/m³, DNEL 33 mg/m³, RCR 0.60 Consumer - dermal, long-term - systemic: Exposure 6 mg/kg/day, DNEL 320 mg/kg/day, RCR 0.11 PC18 Ink and toners. Consumer - inhalation, long-term - systemic: Exposure 0.181 mg/m³, DNEL 33 mg/m³, RCR 0.02 Consumer - dermal, long-term - systemic: Exposure 7.5 mg/kg/day, DNEL 320 mg/kg/day, RCR 0.14

Exposure scenario

Consumer use in cleaning products

Identification

Product name	1-METHOXY-2-PROPYL ACETATE
REACH registration number	01-2119475791-29-XXXX
CAS number	108-65-6
EC number	203-603-9
EU index number	607-195-00-7
Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com

1. Title of exposure scenario

Main title	Consumer use in cleaning products
Process scope	Consumer use of washing and cleaning products
Product category	PC35 Washing and cleaning products
Main sector	SU21 Consumer uses
<u>Environment</u>	
Environmental release category	ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
SPERC	ESVOC SPERC 8.4b.v1

2. Conditions of use affecting exposure (Non-industrial - Environment 1)

Product characteristics

Physical state	Liquid
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Amounts used

Daily amount per site: 0.27 kg

Frequency and duration of use

Emission days: 365 days/year

Environmental factors not influenced by risk management measures

Consumer use in cleaning products

Dilution Local freshwater dilution factor: 10
Local marine water dilution factor: 100

Risk management measures

STP type Municipal STP.

STP details Estimated substance removal from wastewater via domestic sewage treatment: 87.3%

Conditions and measures related to external treatment of waste for disposal

Disposal method Contain and dispose of waste according to local regulations.

2. Conditions of use affecting exposure (Non-industrial - Health 1)

Product characteristics

Physical state Volatile Liquid

Concentration details Covers concentrations up to 10 %.

Amounts used

Amount per use: 16 g

Frequency and duration of use

Covers frequency up to 1 hours/day, 365 days/year, .

Other given operational conditions affecting Non-industrial exposure

Temperature Assumes activities are at room temperature.

Room size 15 m³

Ventilation rate Covers use under typical household ventilation. Unless otherwise stated.

Other given operational conditions affecting Non-industrial exposure

No specific risk management measure identified beyond those operational conditions stated.

3. Exposure estimation (Environment 1)

Assessment method Used ECETOC TRA model.

Environmental exposure Fresh water: Exposure 0.0022 mg/l, PNEC 0.635 mg/l, RCR 0.004
freshwater sediment: Exposure 0.011 mg/kg, PNEC 3.29 mg/kg, RCR 0.004
Marine water: Exposure 0.00039 mg/l, PNEC 0.0635 mg/l, RCR 0.006
marine sediment: Exposure 0.0020 mg/kg, PNEC 0.329 mg/kg, RCR 0.006
Soil: Exposure 0.001 mg/kg, PNEC 0.29 mg/kg, RCR 0.003

4. Guidance to check compliance with the exposure scenario (Environment 1)

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. Further details on scaling and control technologies are provided in SpERC factsheet (<http://cefic.org/en/reach-for-industries-libraries.html>).

3. Exposure estimation (Health 1)

Assessment method The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated

Exposure scenario Consumer use in Agrochemicals

Identification

Product name	1-METHOXY-2-PROPYL ACETATE
REACH registration number	01-2119475791-29-XXXX
CAS number	108-65-6
EC number	203-603-9
EU index number	607-195-00-7
Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com

1. Title of exposure scenario

Main title	Consumer use in Agrochemicals
Process scope	Use as an agrochemical excipient for application by manual or machine spraying, smokes and fogging, including equipment clean-downs and disposal.
Product category	PC27 Plant protection products.
Main sector	SU21 Consumer uses

Environment

Environmental release category	ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
SPERC	ECPA SPERC 8d.2.v1

2. Conditions of use affecting exposure (Non-industrial - Environment 1)

Product characteristics

Physical state	Liquid
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Amounts used

Daily amount per site: 410 kg

Frequency and duration of use

Emission days: 365 days/year

Environmental factors not influenced by risk management measures

Consumer use in Agrochemicals

Dilution	Local freshwater dilution factor: 10 Local marine water dilution factor: 100
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Conditions and measures related to external treatment of waste for disposal

Disposal method	Contain and dispose of waste according to local regulations.
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2. Conditions of use affecting exposure (Non-industrial - Health 1)

Product characteristics

Physical state	Volatile Liquid
Concentration details	Covers concentrations up to 70 %.

Amounts used

Amount per use: 137 g

Frequency and duration of use

Covers frequency up to 0.1 hours/day, 365 days/year, .

Other given operational conditions affecting Non-industrial exposure

Temperature	Assumes activities are at room temperature.
Room size	20 m ³
Ventilation rate	Covers use under typical household ventilation. Unless otherwise stated.

Other given operational conditions affecting Non-industrial exposure

No specific risk management measure identified beyond those operational conditions stated.

3. Exposure estimation (Environment 1)

Assessment method	Used ECETOC TRA model.
Environmental exposure	Fresh water: Exposure 0.0022 mg/l, PNEC 0.635 mg/l, RCR 0.004 freshwater sediment: Exposure 0.011 mg/kg, PNEC 3.29 mg/kg, RCR 0.004 Marine water: Exposure 0.00039 mg/l, PNEC 0.0635 mg/l, RCR 0.006 marine sediment: Exposure 0.0020 mg/kg, PNEC 0.329 mg/kg, RCR 0.006 Soil: Exposure 0.001 mg/kg, PNEC 0.29 mg/kg, RCR 0.003

4. Guidance to check compliance with the exposure scenario (Environment 1)

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. Further details on scaling and control technologies are provided in SpERC factsheet (<http://cefic.org/en/reach-for-industries-libraries.html>).

3. Exposure estimation (Health 1)

Assessment method	The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated
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