

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

Revision date 15-Jan-2026

Revision Number 1

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

1.1. Product identifier

Product Code(s) 49001

Safety data sheet number 49001

Product Name 7A-ETHYLDIHYDRO-1H,3H,5H-OXAZOLO(3,4-C)OXAZOLE

EC Number 231-810-4

CAS No 7747-35-5

Synonyms ZOLDINE ZE OXAZOLIDINE

Pure substance/mixture Substance

Contains 7A-ETHYLDIHYDRO 1H, 3H, 5H-OXAZOLO{ 3,4C} OXAZOLE

Molecular weight 143.19

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

Recommended use Leather treatment
Chemicals used in the synthesis and / or formulation of industrial products

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)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
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Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 1 - (H318)
Skin sensitisation	Category 1 - (H317)
Chronic aquatic toxicity	Category 3 - (H412)

2.2. Label elements

Contains 7A-ETHYLDIHYDRO 1H, 3H, 5H-OXAZOLO{ 3,4C} OXAZOLE



Signal word
Danger

Hazard statements

H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H332 - Harmful if inhaled
H412 - Harmful to aquatic life with long lasting effects

Precautionary statements

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray
P264 - Wash face, hands and any exposed skin thoroughly after handling
P280 - Wear protective gloves and eye/face protection
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor

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)
7A-ETHYLDIHYDR O 1H, 3H, 5H-OXAZOLO{ 3,4C} OXAZOLE 7747-35-5	90 - 100%	231-810-4	-	Aquatic Chronic 3 (H412) Acute Tox. 4 (H332) Skin Sens. 1 (H317) Skin Irrit. 2 (H315)	-	-	-

				Eye Dam. 1 (H318)			
4-ETHYL-4-(HYDR OXYMETHYL)OXA ZOLIDINE 535978-60-0	0 - 10%	-	-	-	-	-	-

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

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air. Get medical attention immediately if symptoms occur. If symptoms persist, call a doctor. If breathing has stopped, give artificial respiration. Get medical attention immediately.
Eye contact	Get immediate medical attention. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area.
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a doctor.
Ingestion	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get medical attention.
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Avoid breathing vapours or mists. Use personal protective equipment as required. See section 8 for more information.

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

Symptoms	Burning sensation. Itching. Rashes. Hives. Coughing and/ or wheezing. Difficulty in breathing.
Inhalation	Harmful if inhaled. Coughing and/or wheezing. Difficulty in breathing.
Eyes	Burning sensation.
Dermal	Causes skin irritation. May cause an allergic skin reaction.

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

Note to doctors	May cause sensitisation in susceptible persons. Treat symptomatically. Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Dry chemical, CO2, alcohol-resistant foam or water spray.
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Large Fire

CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media

Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

Product is or contains a sensitiser. May cause sensitisation by skin contact.

Hazardous combustion products

Carbon oxides. Nitrogen oxides (NOx).

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation. Avoid breathing vapours or mists.

Other information

Refer to protective measures listed in Sections 7 and 8.

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions

Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards

Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections

See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Take off contaminated clothing and wash it before reuse. Avoid breathing vapours or mists.

General hygiene considerations

Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Protect from direct sunlight.

Packaging materials Unsuitable container/equipment material. Aluminium. aluminum alloys. copper. Copper alloys.

7.3. Specific end use(s)

Specific use(s)

See section 1 for more information.

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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

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

Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
7A-ETHYLDIHYDRO 1H, 3H, 5H-OXAZOLO{ 3,4C} OXAZOLE 7747-35-5		6.9 mg/kg bw/day [4] [6]	14.79 mg/m ³ [4] [6]

[4] Systemic health effects.

[6] Long term.

Derived No Effect Level (DNEL) - General Public No information available.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
7A-ETHYLDIHYDRO 1H, 3H, 5H-OXAZOLO{ 3,4C} OXAZOLE 7747-35-5	0.0513 mg/L	0.0108 mg/L	0.00513 mg/L		

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
7A-ETHYLDIHYDRO 1H, 3H, 5H-OXAZOLO{ 3,4C}			1.66 mg/L		

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
OXAZOLE 7747-35-5					

8.2. Exposure controls

Engineering controls No information available.

Personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). According to EN 16321-1.

Hand protection Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. Neoprene. Nitrile rubber. Polyvinyl chloride (PVC). Polyethylene (PE). Gloves must conform to standard EN 374.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
Type AP2.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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

Property	Values	Remarks • Method
Melting point / freezing point	1.0 °C	
Initial boiling point and boiling range	187.0 °C	
Flammability		No information available.
Flammability Limit in Air		No information available.
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point	79.0 °C	Tag Closed Cup. ASTM D 56.
Autoignition temperature	230.0 °C	
Decomposition temperature		No information available.
pH		No information available.
pH (as aqueous solution)	10.0	solution (0.1 %).
Kinematic viscosity		No information available.
Dynamic viscosity	5.20 mPa s	@ 20.0 °C. OECD 114.
Water solubility	No data available	No information available.

Solubility(ies)		No information available.
Partition coefficient	log Pow -0.32	
Vapour pressure	60.6 hPa	@ 25.0 °C.
Relative density		No information available.
Bulk density		No information available
Liquid Density	No information available	No information available
Relative vapour density		No information available.
Particle characteristics		No information available.
Particle Size	No information available	
Particle Size Distribution	No information available	
Explosive properties	No information available	
Oxidising properties	No information available	

9.2. Other information

Molecular weight	143.19
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Stable under recommended storage conditions.
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10.2. Chemical stability

Stability	Stable under normal conditions.
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Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	None under normal processing.
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Hazardous polymerisation	Hazardous polymerisation does not occur.
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10.4. Conditions to avoid

Conditions to avoid	Excessive heat.
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10.5. Incompatible materials

Incompatible materials	Strong oxidising agents. Strong acids.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Carbon oxides. Nitrogen oxides (NOx).
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

Inhalation	Harmful by inhalation.
Eye contact	Causes serious eye damage.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Ingestion	Gastrointestinal discomfort. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Redness. Burning. May cause blindness. Itching. Rashes. Hives. May cause redness and tearing of the eyes. Coughing and/ or wheezing.
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Acute toxicity

Numerical measures of toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
7A-ETHYLDIHYDRO 1H, 3H, 5H-OXAZOLO{ 3,4C} OXAZOLE	-	> 2000 mg/kg (Rat)	-

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

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye damage.
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.
Other adverse effects	No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

Persistence and degradability Not readily biodegradable.

Method	Exposure time	Value	Results
OECD Test No. 301C: Ready Biodegradability: Modified MITI Test (I) (TG 301 C)	28.0 days	14% Biodegradation	Not readily biodegradable

12.3. Bioaccumulative potential

Bioaccumulation No information available.

Bioconcentration factor (BCF) 2 - 3

Component Information

Chemical name	Partition coefficient
7A-ETHYLDIHYDRO 1H, 3H, 5H-OXAZOLO{ 3,4C} OXAZOLE	-0.31

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
7A-ETHYLDIHYDRO 1H, 3H, 5H-OXAZOLO{ 3,4C} OXAZOLE	The substance is not PBT / vPvB

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information

IATA

14.1 UN number or ID number Not regulated

14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

IMDG

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

ADR

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

SECTION 15: Regulatory information

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

National regulations

Authorisations and/or restrictions on use:

This product contains one or more substances subject to restriction (UK REACH - Annex XVII).

This product does not contain substances subject to authorisation (UK REACH - Annex XIV).

Persistent Organic Pollutants

Not applicable

Export Notification requirements

Not applicable

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)

Chemical name	The Biocidal Products Regulations 2001 (as amended)
7A-ETHYLDIHYDRO 1H, 3H, 5H-OXAZOLO{ 3,4C} OXAZOLE - 7747-35-5	Product-type 6: Preservatives for products during storage Product-type 13: Working or cutting fluid preservatives

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

Not applicable

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

Not applicable

International Inventories

TSCA	Contact supplier for inventory compliance status
DSL/NDL	Contact supplier for inventory compliance status
EINECS/ELINCS	Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status
KECI	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AIIC	Contact supplier for inventory compliance status
NZIoC	Contact supplier for inventory compliance status

Legend:

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

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

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

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

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

Revision Note ***Indicates updated data since last publication

Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]
 Acute oral toxicity Method Used
 Calculation method

Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

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

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

Prepared By Jitendra Panchal

Revision date 15-Jan-2026

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

Disclaimer

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

End of Safety Data Sheet

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

Chemical name 7a-Ethyldihydro-1H,3H,5H-oxazolo(3,4-c)oxazole
Pure substance/mixture Substance
REACH registration number 01-2119486558-20-XXXX
CAS No 7747-35-5
EC No (EU Index No) 231-810-4
Supplier Univar Solutions UK Ltd
 Aquarius House
 6 Mid Point Business Park
 Bradford
 GBR

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

E-mail address SDS.EMEA@univarsolutions.com

Section 1 - Title

Title Formulation & (re)packing of substances and mixtures
Type Worker
Main user group Industrial uses: Uses of substances as such or in preparations at industrial sites
Environmental release category(ies) ERC2 - Formulation of preparations (mixtures)
Process category(ies) PROC1 - Use in closed process, no likelihood of exposure
 PROC3 - Use in closed batch process (synthesis or formulation)
 PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises
 PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
 PROC15 - Use as laboratory reagent
Sector(s) of use SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

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

Covers concentrations up to 100%

Amounts used

Type	Annual amount per site
Value	25
Units	t(ons)/year

Type	Msporc
Value	1562
Units	kg/d

Product characteristics

Physical form of product	Liquid
Temperature associated to vapour pressure	<= 20°C
Volatility	Low

Other operational conditions of use affecting environmental exposure

Type	Continuous release
Emission days	16

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Risk management measures

Technical onsite conditions and measures to reduce or limit discharges, air emissions	Site should have a spill plan to ensure that adequate safeguards are in place to minimise the impact of episodic releases A leak prevention plan is needed to prevent low level continual releases Prevent leaks and prevent soil/water pollution caused by leaks Bund storage facilities to prevent soil and water pollution in the event of spillage Prevent discharge of undissolved substance to or recover from onsite wastewater
Additional good practice advice beyond the REACH Chemical Safety Report	Use vapour recovery units when necessary

Control measures to prevent releases

Water	If discharging to domestic sewage treatment plant, no onsite wastewater treatment required Anaerobic biological treatment
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Conditions and measures related to external treatment of waste for disposal

Disposal	Dispose of waste cans and containers according to local regulations
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Control of worker exposure

Process category(ies)	PROC1 - Use in closed process, no likelihood of exposure
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	Handle substance within a closed system
Indoor/Outdoor use	Indoor use
Assumes process temperature up to	20°C

Process category(ies)	PROC3 - Use in closed batch process (synthesis or formulation)
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour)
Indoor/Outdoor use	Indoor use
Assumes process temperature up to	20°C

Process category(ies)	PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises
Covers concentrations up to	100%
Physical form of product	Liquid
Exposure duration	Avoid carrying out activities involving exposure for more than 4 hours
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour)
Conditions and measures related to personal protection, hygiene and health evaluation	Wear chemically resistant gloves (tested to EN 374) in combination with 'basic' employee training Efficiency of at least 90%
Indoor/Outdoor use	Indoor use
Assumes process temperature up to	20°C

Process category(ies)	PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	Provide extract ventilation to points where emissions occur
Conditions and measures related to personal protection, hygiene and health evaluation	Wear chemically resistant gloves (tested to EN 374) in combination with 'basic' employee training Efficiency of at least 90%
Indoor/Outdoor use	Covers indoor and outdoor use
Assumes process temperature up to	20°C

Process category(ies)	PROC15 - Use as laboratory reagent
Covers concentrations up to	100%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	Provide extract ventilation to points where emissions occur
Indoor/Outdoor use	Indoor use
Assumes process temperature up to	20°C

Section 3 - Exposure estimation

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

Predicted No Effect Concentration (PNEC)

Freshwater	0.051 mg/l
Freshwater sediment	0.236 mg/kg d.w.
Marine water	0.0051 mg/l
Marine sediment	0.0236 mg/kg d.w.
Soil	0.017 mg/kg d.w.

Calculation method Used EUSES model

Environment	predicted exposure level	Risk characterisation ratio (RCR)
Freshwater	0.0458 mg/l	0.892
Marine water	0.00457 mg/l	0.892
Freshwater sediment	0.211 mg/kg d.w.	0.892
Marine sediment	0.00457 mg/kg d.w.	0.892
STP: Sewage Treatment Plant	0.448 mg/l	0.27
Soil	0.00402 mg/kg d.w.	0.235

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	6.9 mg/kg bw/d
Worker - inhalative, long-term - systemic	14.79 mg/m ³

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

Process category(ies)	Exposure route	predicted exposure level	Risk characterisation ratio (RCR)
PROC1 - Use in closed process, no likelihood of exposure	Worker - inhalative, long-term - systemic	0.06 mg/m ³	0.00
PROC1 - Use in closed process, no likelihood of exposure	Worker - dermal, long-term - systemic	0.34 mg/cm ²	0.05
PROC1 - Use in closed process, no likelihood of exposure	Worker - combined, long-term - systemic		0.05
PROC3 - Use in closed batch process (synthesis or formulation)	Worker - inhalative, long-term - systemic	12.53 mg/m ³	0.85
PROC3 - Use in closed batch process (synthesis or formulation)	Worker - dermal, long-term - systemic	0.34 mg/cm ²	0.05
PROC3 - Use in closed batch process (synthesis or formulation)	Worker - combined, long-term - systemic		0.90
PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises	Worker - inhalative, long-term - systemic	12.53 mg/m ³	0.85
PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises	Worker - dermal, long-term - systemic	0.41 mg/cm ²	0.05
PROC4 - Use in batch and other process (synthesis) where opportunity for exposure arises	Worker - combined, long-term - systemic		0.91
PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities	Worker - inhalative, long-term - systemic	5.97 mg/m ³	0.4
PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities	Worker - dermal, long-term - systemic	1.37 mg/cm ²	0.2
PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities	Worker - combined, long-term - systemic		0.6
PROC15 - Use as laboratory reagent	Worker - inhalative, long-term - systemic	2.98 mg/m ³	0.20
PROC15 - Use as laboratory reagent	Worker - dermal, long-term - systemic	0.34 mg/cm ²	0.05
PROC15 - Use as laboratory reagent	Worker - combined, long-term - systemic		0.25

Section 4 - Guidance to check compliance with the exposure scenario

If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is required. 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 wastewater can be achieved using onsite/offsite technologies, either alone or in combination. Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination. Further details on scaling and control technologies are provided in SpERC factsheet (<http://cefic.org/en/reach-for-industries-libraries.html>).

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

Chemical name 7a-Ethylidihydro-1H,3H,5H-oxazolo(3,4-c)oxazole
Pure substance/mixture Substance
REACH registration number 01-2119486558-20-XXXX
CAS No 7747-35-5
EC No (EU Index No) 231-810-4
Supplier Univar Solutions UK Ltd
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Section 1 - Title

Title Leather treatment products Leather articles Manufacture of textiles, leather, fur
Type Worker
Main user group Industrial uses: Uses of substances as such or in preparations at industrial sites
Environmental release category(ies) ERC5 - Industrial use resulting in inclusion into or onto a matrix
Process category(ies) PROC2 - Use in closed, continuous process with occasional controlled exposure
 PROC3 - Use in closed batch process (synthesis or formulation)
 PROC5 - Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact)
 PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
 PROC11 - Non industrial spraying
Product category(ies) PC23 - Leather tanning, dye, finishing, impregnation and care products
Article categories AC6 - Leather articles
Sector(s) of use SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites SU5 - Manufacture of textiles, leather, fur

Section 2 - Operational conditions and risk management measures

Section 2.1 - Control of environmental exposure

Environmental release category(ies) - ERC5 - Industrial use resulting in inclusion into or onto a matrix

Covers concentrations up to 100%

Product characteristics

Physical form of product	Liquid
Temperature associated to vapour pressure	<= 20°C
Volatility	Low

Environmental factors not influenced by risk management

Local freshwater dilution factor	10
Local marine water dilution factor	100

Risk management measures

Technical onsite conditions and measures to reduce or limit discharges, air emissions	Site should have a spill plan to ensure that adequate safeguards are in place to minimise the impact of episodic releases A leak prevention plan is needed to prevent low level continual releases Prevent leaks and prevent soil/water pollution caused by leaks Bund storage facilities to prevent soil and water pollution in the event of spillage Prevent discharge of undissolved substance to or recover from onsite wastewater
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Additional good practice advice beyond the REACH Chemical Safety Report	Use vapour recovery units when necessary
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Control measures to prevent releases

Water	Assumed domestic sewage treatment plant flow Anaerobic biological treatment
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Conditions and measures related to external treatment of waste for disposal

Disposal	Dispose of waste cans and containers according to local regulations
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Control of worker exposure

Process category(ies)	PROC2 - Use in closed, continuous process with occasional controlled exposure
Covers concentrations up to	5%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	Limit the substance content in the product to 5 %
Indoor/Outdoor use	Indoor use
Assumes process temperature up to	20°C

Process category(ies)	PROC3 - Use in closed batch process (synthesis or formulation)
Covers concentrations up to	5%
Physical form of product	Liquid
Exposure duration	Avoid carrying out activities involving exposure for more than 4 hours
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour) Limit the substance content in the product to 5 %
Indoor/Outdoor use	Indoor use
Assumes process temperature up to	20°C

Process category(ies)	PROC5 - Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact)
Title	Mixing operations (open systems)
Covers concentrations up to	100%
Physical form of product	Liquid
Exposure duration	Avoid carrying out activities involving exposure for more than 1 hour
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour)
Conditions and measures related to personal protection, hygiene and health evaluation	Wear chemically resistant gloves (tested to EN 374) in combination with 'basic' employee training Efficiency of at least 90% Wear a respirator conforming to EN 140 with Type A filter or better Efficiency of at least 90%
Indoor/Outdoor use	Indoor use
Assumes process temperature up to	20°C

Process category(ies)	PROC5 - Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact)
Title	General exposures (open systems)
Covers concentrations up to	5%

Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	Limit the substance content in the product to 5 %
Conditions and measures related to personal protection, hygiene and health evaluation	Wear chemically resistant gloves (tested to EN 374) in combination with 'basic' employee training Efficiency of at least 90% Wear a respirator conforming to EN 140 with Type A filter or better Efficiency of at least 90%
Indoor/Outdoor use	Indoor use
Assumes process temperature up to	20°C
Process category(ies)	PROC5 - Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact)
Covers concentrations up to	1%
Physical form of product	Liquid
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	Limit the substance content in the product to 1 %
Conditions and measures related to personal protection, hygiene and health evaluation	Wear chemically resistant gloves (tested to EN 374) in combination with 'basic' employee training Efficiency of at least 90% Wear a respirator conforming to EN 140 with Type A filter or better Efficiency of at least 90%
Indoor/Outdoor use	Indoor use
Assumes process temperature up to	20°C
Process category(ies)	PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities
Covers concentrations up to	5%
Physical form of product	Liquid
Exposure duration	Avoid carrying out activities involving exposure for more than 1 hour
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	Limit the substance content in the product to 5 %
Conditions and measures related to personal protection, hygiene and health evaluation	Wear a respirator conforming to EN 140 with Type A filter or better Efficiency of at least 90%
Indoor/Outdoor use	Indoor use
Assumes process temperature up to	20°C
Process category(ies)	PROC11 - Non industrial spraying
Covers concentrations up to	5%
Physical form of product	Liquid
Exposure duration	Avoid carrying out activities involving exposure for more than 4 hours
Use frequency	Covers daily exposures up to 8 hours (unless stated differently).
Technical conditions and measures to control dispersion from source towards the worker	Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour) Limit the substance content in the product to 5 %
Conditions and measures related to personal protection, hygiene and health evaluation	Wear chemically resistant gloves (tested to EN 374) in combination with 'basic' employee training Efficiency of at least 90% Wear a respirator conforming to EN 140 with Type A filter or better Efficiency of at least 90%
Indoor/Outdoor use	Indoor use

Assumes process temperature up to	20°C
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Section 3 - Exposure estimation

Environmental release category(ies) - ERC5 - Industrial use resulting in inclusion into or onto a matrix

Predicted No Effect Concentration (PNEC)

Freshwater	0.051 mg/l
Freshwater sediment	0.236 mg/kg d.w.
Marine water	0.0051 mg/l
Marine sediment	0.0236 mg/kg d.w.
Soil	0.017 mg/kg d.w.

Calculation method Used EUSES model

Environment	predicted exposure level	Risk characterisation ratio (RCR)
Freshwater	0.00102 mg/l	0.02
Marine water	0.0000985 mg/l	0.02
Freshwater sediment	0.00468 mg/kg d.w.	0.019
Marine sediment	0.000453 mg/kg d.w.	0.019
STP: Sewage Treatment Plant	< 0.01 mg/l	< 0.01
Soil	< 0.01 mg/kg d.w.	< 0.01

Derived No Effect Level (DNEL):

Worker - dermal, long-term - systemic	6.9 mg/kg bw/d
Worker - inhalative, long-term - systemic	14.79 mg/m ³

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

Process category(ies)	Exposure route	predicted exposure level	Risk characterisation ratio (RCR)
PROC2 - Use in closed, continuous process with occasional controlled exposure	Worker - inhalative, long-term - systemic	5.97 mg/m ³	0.40
PROC2 - Use in closed, continuous process with occasional controlled exposure	Worker - dermal, long-term - systemic	1.37 mg/cm ²	0.20
PROC2 - Use in closed, continuous process with occasional controlled exposure	Worker - combined, long-term - systemic		0.60
PROC3 - Use in closed batch process (synthesis or formulation)	Worker - inhalative, long-term - systemic	3.58 mg/m ³	0.24
PROC3 - Use in closed batch process (synthesis or formulation)	Worker - dermal, long-term - systemic	0.34 mg/cm ²	0.05
PROC3 - Use in closed batch process (synthesis or formulation)	Worker - combined, long-term - systemic		0.29
PROC5 - Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact)	Worker - inhalative, long-term - systemic	11.93 mg/m ³	0.81

PROC5 - Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact)	Worker - dermal, long-term - systemic	0.07 mg/cm ²	0.01
PROC5 - Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact)	Worker - combined, long-term - systemic		0.82
PROC5 - Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact)	Worker - inhalative, long-term - systemic	11.93 mg/m ³	0.81
PROC5 - Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact)	Worker - dermal, long-term - systemic	0.07 mg/cm ²	0.01
PROC5 - Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact)	Worker - combined, long-term - systemic		0.82
PROC5 - Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact)	Worker - inhalative, long-term - systemic	5.97 mg/m ³	0.40
PROC5 - Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact)	Worker - dermal, long-term - systemic	0.01 mg/cm ²	0.01
PROC5 - Mixing or blending in batch processes for formulation of preparations and articles (multi-stage and/or significant contact)	Worker - combined, long-term - systemic		0.41
PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities	Worker - inhalative, long-term - systemic	2.98 mg/m ³	0.2
PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities	Worker - dermal, long-term - systemic	2.74 mg/cm ²	0.4
PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities	Worker - combined, long-term - systemic		0.6
PROC11 - Non industrial spraying	Worker - inhalative, long-term - systemic	11.93 mg/m ³	0.81
PROC11 - Non industrial spraying	Worker - dermal, long-term - systemic	0.21 mg/cm ²	0.03
PROC11 - Non industrial spraying	Worker - combined, long-term - systemic		0.84

Section 4 - Guidance to check compliance with the exposure scenario

If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is

required. 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 wastewater can be achieved using onsite/offsite technologies, either alone or in combination. Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination. Further details on scaling and control technologies are provided in SpERC factsheet (<http://cefic.org/en/reach-for-industries-libraries.html>).