

SAFETY DATA SHEET

According to REACH Regulation (EC) No 1907/2006, as amended by
UK REACH Regulations SI 2019/758



POLCOB® A12

Version	Revision Date:	SDS Number:	Date of last issue: 13.12.2022
2.0	22.04.2024	600000000839	Date of first issue: 08.12.2022

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

1.1 Product identifier

Trade name : POLCOB® A12

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

Use of the Sub-
stance/Mixture : Catalyst

1.3 Details of the supplier of the safety data sheet

Company : United Initiators GmbH
Dr.-Gustav-Adolph-Str. 3
82049 Pullach

Telephone : +49 / 89 / 74422 – 0

E-mail address of person
responsible for the SDS : contact@united-in.com

1.4 Emergency telephone number

+44 1235 239670

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Flammable liquids, Category 3 H226: Flammable liquid and vapour.

Serious eye damage, Category 1 H318: Causes serious eye damage.

Specific target organ toxicity - single exposure, Category 3, Respiratory system H335: May cause respiratory irritation.

Long-term (chronic) aquatic hazard, Category 3 H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)


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Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	H226 Flammable liquid and vapour. H318 Causes serious eye damage. H335 May cause respiratory irritation. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	:	Prevention: P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing mist or vapours. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection. Response: P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. P370 + P378 In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.

Hazardous components which must be listed on the label:
ethyl-(S)-lactate (CAS-No. 687-47-8)

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Mixture
contains polymer bound cobalt

Components

Chemical name	CAS-No. EC-No. Index-No.	Classification	Concentration (% w/w)

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	Registration number		
ethyl-(S)-lactate	687-47-8 211-694-1 607-129-00-7 01-2119516234-49	Flam. Liq. 3; H226 Eye Dam. 1; H318 STOT SE 3; H335 (Respiratory system)	>= 70 - < 75
2,6-di-tert-butyl-p-cresol	128-37-0 204-881-4 01-2119555270-46	Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 1	>= 0.25 - < 1

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Take off contaminated clothing and shoes immediately.
Call a physician immediately.
Never give anything by mouth to an unconscious person.
If unconscious, place in recovery position and seek medical advice.
Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- Protection of first-aiders : First Aid responders should pay attention to self-protection and use the recommended protective clothing
- If inhaled : Administer oxygen if breathing is difficult or cyanosis is observed.
If breathed in, move person into fresh air.
If not breathing, give artificial respiration.
Respiratory tract burning possible if aerosols are inhaled.
If unconscious, place in recovery position and seek medical advice.
Keep respiratory tract clear.
If symptoms persist, call a physician.
- In case of skin contact : If symptoms persist, call a physician.
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Wash contaminated clothing before re-use.
If on skin, rinse well with water.

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- If on clothes, remove clothes.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Continue rinsing eyes during transport to hospital.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Call a physician immediately.
Rinse mouth thoroughly with water.
Keep respiratory tract clear.
Do NOT induce vomiting.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

- Risks : Causes serious eye damage.
May cause respiratory irritation.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Water spray jet
Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical

- Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

- Specific hazards during fire-fighting : Do not allow run-off from fire fighting to enter drains or water courses.
Vapours may form explosive mixtures with air.
The product will float on water and can be reignited on surface water.
Cool closed containers exposed to fire with water spray.

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5.3 Advice for firefighters

- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.
- Specific extinguishing methods : Do not use a solid water stream as it may scatter and spread fire.
Remove undamaged containers from fire area if it is safe to do so.
Use water spray to cool unopened containers.
- Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use a water spray to cool fully closed containers.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
-

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Personal precautions : Follow safe handling advice and personal protective equipment recommendations.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Use personal protective equipment.
Remove all sources of ignition.
Evacuate personnel to safe areas.
Treat recovered material as described in the section "Disposal considerations".

6.2 Environmental precautions

- Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

- Methods for cleaning up : Clear spills immediately.
Suppress (knock down) gases/vapours/mists with a water spray jet.
To clean the floor and all objects contaminated by this material, use plenty of water.
Soak up with inert absorbent material.
Isolate waste and do not reuse.
Non-sparking tools should be used.
Local or national regulations may apply to releases and dis-

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posal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- | | | |
|---|---|--|
| Technical measures | : | See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section. |
| Advice on safe handling | : | Open drum carefully as content may be under pressure. Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Avoid formation of aerosol. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Avoid confinement. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Smoking, eating and drinking should be prohibited in the application area. Wash thoroughly after handling. For personal protection see section 8. |
| Advice on protection against fire and explosion | : | Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Keep away from heat and sources of ignition. Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition. Do not spray on a naked flame or any incandescent material. |
| Hygiene measures | : | Avoid contact with skin, eyes and clothing. Keep away from food and drink. When using do not eat or drink. When using do not smoke. Wash hands before breaks and immediately after handling the product. |

7.2 Conditions for safe storage, including any incompatibilities

- | | | |
|---|---|--|
| Requirements for storage areas and containers | : | Observe label precautions. Store in accordance with the particular national regulations. Electrical installations / working materials must comply with the technological safety standards. Containers which are opened must be carefully resealed and kept upright to prevent leakage. |
| Recommended storage temperature | : | 5 - 30 °C |

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7.3 Specific end use(s)

Specific use(s) : For further information, refer to the product technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
2,6-di-tert-butyl-p-cresol	128-37-0	TWA	10 mg/m ³	GB EH40

Derived No Effect Level (DNEL):

Substance name	End Use	Exposure routes	Potential health effects	Value
2,6-di-tert-butyl-p-cresol	Workers	Inhalation	Long-term systemic effects	4.4 mg/m ³
	Workers	Inhalation	Systemic effects, Short-term exposure	18 mg/m ³
	Workers	Skin contact	Long-term systemic effects	4.7 mg/kg bw/day
	Workers	Skin contact	Systemic effects, Short-term exposure	19 mg/kg bw/day

Predicted No Effect Concentration (PNEC):

Substance name	Environmental Compartment	Value
2,6-di-tert-butyl-p-cresol	Fresh water	0.0023 mg/l
	Intermittent use/release	0.004 mg/l
	Marine water	0.00023 mg/l
	Sewage treatment plant	100 mg/l
	Fresh water sediment	3.4 mg/kg dry weight (d.w.)
	Marine sediment	0.34 mg/kg dry weight (d.w.)
	Soil	0.24 mg/kg dry weight (d.w.)
	Secondary poisoning	16.7 mg/kg

8.2 Exposure controls

Engineering measures

Minimize workplace exposure concentrations.

Personal protective equipment

Eye/face protection : Ensure that eyewash stations and safety showers are close to the workstation location.

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Please follow all applicable local/national requirements when selecting protective measures for a specific workplace. Always wear eye protection when the potential for inadvertent eye contact with the product cannot be excluded.

Tightly fitting safety goggles

Please wear suitable protective goggles. Also wear face protection if there is a splash hazard.

Hand protection

Material : butyl-rubber
Break through time : 480 min
Glove thickness : 0.47 mm

Remarks

: The data about break through time/strength of material are standard values! The exact break through time/strength of material has to be obtained from the producer of the protective glove. Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

Skin and body protection

: Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential. Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, disposable suits) to avoid exposed skin surfaces. Wear as appropriate:
Flame retardant antistatic protective clothing.

Respiratory protection

: In the case of dust or aerosol formation use respirator with an approved filter.

Filter type

: ABEK-filter

Protective measures

: The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

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Appearance	:	viscous liquid
Colour	:	violet
Odour	:	characteristic
Melting point/range	:	not determined
Boiling point/boiling range	:	153 °C
Flash point	:	54 °C Method: closed cup
Upper explosion limit / Upper flammability limit	:	11.4 %(V)
Lower explosion limit / Lower flammability limit	:	1.5 %(V)
Vapour pressure	:	ca. 1.8 hPa (20 °C)
Density	:	ca. 1 g/cm ³ (20 °C)
Solubility(ies) Water solubility	:	insoluble
Explosive properties	:	Not explosive

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions.

10.2 Chemical stability

Stable under recommended storage conditions.
No decomposition if stored normally.

10.3 Possibility of hazardous reactions

Hazardous reactions : None known.

10.4 Conditions to avoid

Conditions to avoid : Protect from contamination.
Heat, flames and sparks.

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10.5 Incompatible materials

Materials to avoid : No data available

Not applicable

10.6 Hazardous decomposition products

Irritant, caustic, flammable, noxious/toxic gases and vapours can develop in the case of fire and decomposition

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Not classified due to lack of data.

Components:

ethyl-(S)-lactate:

Acute oral toxicity : LD50 Oral (Rat): > 2,000 mg/kg
Assessment: The substance or mixture has no acute oral toxicity
Remarks: No mortality observed at this dose.

Acute inhalation toxicity : LC50 (Rat): > 5,400 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: No mortality observed at this dose.

Acute dermal toxicity : Remarks: No data available

2,6-di-tert-butyl-p-cresol:

Acute oral toxicity : LD50 (Rat, male and female): > 2,930 mg/kg
Method: OECD Test Guideline 401
Assessment: The substance or mixture has no acute oral toxicity
Remarks: No mortality observed at this dose.

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: No mortality observed at this dose.

Skin corrosion/irritation

Not classified due to lack of data.

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Product:

Remarks : Extremely corrosive and destructive to tissue.

Components:

ethyl-(S)-lactate:

Remarks : Based on available data, the classification criteria are not met.

2,6-di-tert-butyl-p-cresol:

Species : Rabbit
Result : No skin irritation
Remarks : Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Remarks : May cause irreversible eye damage.

Components:

ethyl-(S)-lactate:

Result : Corrosive
Remarks : May cause irreversible eye damage.

2,6-di-tert-butyl-p-cresol:

Species : Rabbit
Result : No eye irritation
Remarks : Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation

Skin sensitisation

Not classified due to lack of data.

Respiratory sensitisation

Not classified due to lack of data.

Components:

ethyl-(S)-lactate:

Remarks : Based on available data, the classification criteria are not met.

2,6-di-tert-butyl-p-cresol:

Exposure routes : Skin contact
Species : Humans

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Remarks : No known sensitising effect.

Germ cell mutagenicity

Not classified due to lack of data.

Components:

2,6-di-tert-butyl-p-cre sol:

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: Metabolic activation
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Test system: rat hepatocytes
Result: negative

Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster ovary cells
Metabolic activation: Metabolic activation
Result: negative

Genotoxicity in vivo : Test Type: Cytogenetic assay
Species: Rat (male)
Cell type: Bone marrow
Application Route: Oral
Result: negative

Test Type: Micronucleus test
Species: Mouse (male and female)
Cell type: Bone marrow
Application Route: Intraperitoneal injection
Result: negative

Carcinogenicity

Not classified due to lack of data.

Components:

2,6-di-tert-butyl-p-cre sol:

Species : Rat, male and female
: 247 mg/kg bw/day
Target Organs : Liver

Reproductive toxicity

Not classified due to lack of data.

Components:

2,6-di-tert-butyl-p-cre sol:

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Effects on fertility : Test Type: Two-generation study
Species: Rat, male and female
Application Route: Oral
Fertility: NOAEL: 500 mg/kg body weight

Effects on foetal development : Test Type: Two-generation study
Species: Rat, male and female
General Toxicity Maternal: NOAEL: 100 mg/kg body weight
Developmental Toxicity: NOAEL: 100 mg/kg body weight

STOT - single exposure

May cause respiratory irritation.

Components:

ethyl-(S)-lactate:

Assessment : May cause respiratory irritation.

STOT - repeated exposure

Not classified due to lack of data.

Repeated dose toxicity

Components:

2,6-di-tert-butyl-p-cresol:

Species : Rat, male
NOAEL : 25 mg/kg
Application Route : Oral
Exposure time : 35 - 56 d
Target Organs : Liver
Symptoms : alteration in liver enzymes

Aspiration toxicity

Not classified due to lack of data.

Components:

ethyl-(S)-lactate:

No aspiration toxicity classification

Further information

Product:

Remarks : Solvents may degrease the skin.

Components:

ethyl-(S)-lactate:

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Remarks : Solvents may degrease the skin.

SECTION 12: Ecological information

12.1 Toxicity

Components:

ethyl-(S)-lactate:

Toxicity to fish : LC50 (Fish): 320 mg/l
Exposure time: 96 h

2,6-di-tert-butyl-p-cresol:

Toxicity to fish : NOEC (Oryzias latipes (Orange-red killifish)): 0.053 mg/l
Exposure time: 42 d

LC50 (Danio rerio (zebra fish)): > 0.57 mg/l
Exposure time: 96 h
Method: Regulation (EC) No. 440/2008, Annex, C.1

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.48 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): > 0.4 mg/l
Exposure time: 72 h
Test Type: Growth inhibition
Method: Regulation (EC) No. 440/2008, Annex, C.3

NOEC (Desmodesmus subspicatus (green algae)): 0.4 mg/l
Exposure time: 72 h
Test Type: Growth inhibition
Method: Regulation (EC) No. 440/2008, Annex, C.3

M-Factor (Acute aquatic toxicity) : 1

Toxicity to microorganisms : EC50 : > 10,000 mg/l
Exposure time: 3 h
Test Type: Respiration inhibition of activated sludge
Method: OECD Test Guideline 209

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.023 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)

M-Factor (Chronic aquatic toxicity) : 1

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12.2 Persistence and degradability

Components:

2,6-di-tert-butyl-p-cresol:

Biodegradability : Result: Not readily biodegradable.
Biodegradation: 4.5 %
Exposure time: 28 d
Method: OECD Test Guideline 301

12.3 Bioaccumulative potential

Components:

2,6-di-tert-butyl-p-cresol:

Bioaccumulation : Bioconcentration factor (BCF): > 2,000

Partition coefficient: n-octanol/water : log Pow: 5.1

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Product:

Endocrine disrupting potential : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects.

Components:

ethyl-(S)-lactate:

Additional ecological information : No data available

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Product : Dispose of wastes in an approved waste disposal facility.
The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
- Contaminated packaging : Dispose of in accordance with local regulations.
Clean container with water.
Dispose of contents/ container to an approved waste disposal plant.
Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: Transport information

14.1 UN number

- ADR : UN 1993
RID : UN 1993
IMDG : UN 1993
IATA : UN 1993

14.2 UN proper shipping name

- ADR : FLAMMABLE LIQUID, N.O.S.
(ethyl (S)-2-hydroxypropionate)
RID : FLAMMABLE LIQUID, N.O.S.
(ethyl (S)-2-hydroxypropionate)
IMDG : FLAMMABLE LIQUID, N.O.S.
(ethyl (S)-2-hydroxypropionate)
IATA : Flammable liquid, n.o.s.
(ethyl (S)-2-hydroxypropionate)

14.3 Transport hazard class(es)

- | | Class | Subsidiary risks |
|-----|-------|------------------|
| ADR | : 3 | |
| RID | : 3 | |

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IMDG : 3

IATA : 3

14.4 Packing group

ADR

Packing group : III
Classification Code : F1
Hazard Identification Number : 30
Labels : 3
Tunnel restriction code : (D/E)

RID

Packing group : III
Classification Code : F1
Hazard Identification Number : 30
Labels : 3

IMDG

Packing group : III
Labels : 3
EmS Code : F-E, S-E

IATA (Cargo)

Packing instruction (cargo aircraft) : 366
Packing instruction (LQ) : Y344
Packing group : III
Labels : Flammable Liquids

IATA (Passenger)

Packing instruction (passenger aircraft) : 355
Packing instruction (LQ) : Y344
Packing group : III
Labels : Flammable Liquids

14.5 Environmental hazards

ADR

Environmentally hazardous : no

RID

Environmentally hazardous : no

IMDG

Marine pollutant : no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

- | | | |
|---|---|--|
| UK REACH List of restrictions (Annex 17) | : | Conditions of restriction for the following entries should be considered: Number on list 3 |
| UK REACH Candidate list of substances of very high concern (SVHC) for Authorisation | : | Not applicable |
| The Persistent Organic Pollutants Regulations (retained Regulation (EU) 2019/1021 as amended for Great Britain) | : | Not applicable |
| Regulation (EC) No 1005/2009 on substances that deplete the ozone layer | : | Not applicable |
| UK REACH List of substances subject to authorisation (Annex XIV) | : | Not applicable |
| GB Export and import of hazardous chemicals - Prior Informed Consent (PIC) Regulation | : | Not applicable |

Control of Major Accident Hazards Regulations 2015 (COMAH) P5c FLAMMABLE LIQUIDS

Other regulations:

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to new and expectant mothers at work contained in Regulation 16 to 18) and of the Pregnant Workers Directive 92/85/EEC.

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to protection of young people at work contained in Regulation 19) and of Directive 94/33/EC on the protection of young people at work.

The components of this product are reported in the following inventories:

- | | | |
|-----------|---|---|
| TCSI (TW) | : | On the inventory, or in compliance with the inventory |
| TSCA (US) | : | All substances listed as active on the TSCA inventory |

SAFETY DATA SHEET

According to REACH Regulation (EC) No 1907/2006, as amended by
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DSL (CA) : This product contains the following components listed on the Canadian NDSL. All other components are on the Canadian DSL.

N,N-diethyl-3-oxobutyramide

ENCS (JP) : On the inventory, or in compliance with the inventory

ISHL (JP) : On the inventory, or in compliance with the inventory

PICCS (PH) : On the inventory, or in compliance with the inventory

15.2 Chemical safety assessment

This information is not available.

SECTION 16: Other information

Further information

Other information : This safety datasheet only contains information relating to safety and does not replace any product information or product specification.
These safety instructions also apply to empty packaging which may still contain product residues.
The hazards on the label also apply to residues in the container.

Sources of key data used to compile the Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Classification of the mixture:

Flam. Liq. 3	H226
Eye Dam. 1	H318
STOT SE 3	H335
Aquatic Chronic 3	H412

Classification procedure:

Based on product data or assessment
Calculation method
Calculation method
Calculation method

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Full text of H-Statements

H226	: Flammable liquid and vapour.
H318	: Causes serious eye damage.
H335	: May cause respiratory irritation.
H400	: Very toxic to aquatic life.
H410	: Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Aquatic Acute	: Short-term (acute) aquatic hazard
Aquatic Chronic	: Long-term (chronic) aquatic hazard
Eye Dam.	: Serious eye damage
Flam. Liq.	: Flammable liquids
STOT SE	: Specific target organ toxicity - single exposure
GB EH40	: UK. EH40 WEL - Workplace Exposure Limits
GB EH40 / TWA	: Long-term exposure limit (8-hour TWA reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECl - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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