TBPEHC

Version	Revision Date:	SDS Number:	Date of last issue: 04.12.2025
3.3	11.12.2025	600000000002	Date of first issue: 10.03.2016

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

1.1 Product identifier

Trade name	:	TBPEHC
REACH Registration Number	:	01-2119964023-44-0002
Substance name	:	tert-Butyl peroxy-2-ethylhexylcarbonate
EC-No.	:	252-029-5
Other means of identification	:	OO-tert-butyl O-(2-ethylhexyl) peroxycarbonate

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

Use of the Substance/Mixture	:	polymerisation initiators
Recommended restrictions on use	:	Exposure Scenario is available as separate attachment., For further information see eSDS.

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

0800 000 7801 (toll-free, access from Germany only) +49 89 220 61012

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Organic peroxides, Type D	H242: Heating may cause a fire.
Short-term (acute) aquatic hazard, Category 1	H400: Very toxic to aquatic life.
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)

Hazard pictograms :

Signal word : Danger

Hazard statements :

H242	Heating may cause a fire.
H410	Very toxic 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.
P234	Keep only in original packaging.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

Response:

P370 + P378	In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.
P391	Collect spillage.

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.

Ecological information: 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.

Toxicological information: 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.

SECTION 3: Composition/information on ingredients

3.1 Substances

Substance name : tert-Butyl peroxy-2-ethylhexylcarbonate

EC-No. : 252-029-5

Chemical nature : Organic Peroxide

liquid

Components

Chemical name	CAS-No. EC-No.	Concentration (% w/w)	M-Factor, SCL, ATE
tert-Butyl peroxy-2-ethylhexylcarbonate	34443-12-4 252-029-5	<= 100	M-Factor (Acute aquatic toxicity): 1

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Take off contaminated clothing and shoes 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.
Consult a physician.
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.
If unconscious, place in recovery position and seek medical advice.
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.
If on clothes, remove clothes.

In case of eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Rinse mouth thoroughly with water.
Keep respiratory tract clear.

If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

None known.

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 : Risk of explosion if heated under confinement.
Possible emission of gaseous decomposition products may lead to a dangerous pressure build-up.
Avoid confinement.
Contact with incompatible materials or exposure to temperatures exceeding SADT may result in a self-accelerating decomposition reaction with release of flammable vapors which may auto-ignite.
The product burns violently.
Flash back possible over considerable distance.
Do not allow run-off from fire fighting to enter drains or water courses.
Vapours may form explosive mixtures with air.
Cool closed containers exposed to fire with water spray.

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.
Never return spills in original containers for re-use.
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 : Contact with incompatible substances can cause decomposition at or below SADT.
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 disposal 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. Protect from contamination. Do not swallow. Do not breathe vapours/dust. Avoid contact with skin and eyes. Avoid formation of aerosol. Take precautionary measures against static discharges. Never return any product to the container from which it was originally removed. 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. Keep away from combustible 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	:	Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Contamination may result in dangerous pressure increases - closed containers may rupture. Observe label precautions. Store in accordance with the particular national regulations. Avoid impurities (e.g. rust, dust, ash), risk of decomposition. 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.
Advice on common storage	:	Keep away from combustible materials. Keep away from strong acids, bases, heavy metal salts and other reducing substances.
Storage class (TRGS 510)	:	5.2
Recommended storage temperature	:	< 20 °C

Further information on storage stability : Stable under recommended storage conditions.

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

Contains no substances with occupational exposure limit values.

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006

Substance name	End Use	Exposure routes	Potential health effects	Value
tert-Butyl peroxy-2-ethylhexylcarbonate	Workers	Inhalation	Long-term systemic effects	59,2 mg/m3
	Workers	Skin contact	Long-term systemic effects	84 mg/kg bw/day

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006

Substance name	Environmental Compartment	Value
tert-Butyl peroxy-2-ethylhexylcarbonate	Fresh water	0,214 µg/l
	Intermittent use/release	2,14 µg/l
	Marine water	0,021 µg/l
	Sewage treatment plant	3,16 mg/l
	Fresh water sediment	0,129 mg/kg dry weight (d.w.)
	Marine sediment	0,0129 mg/kg dry weight (d.w.)
	Soil	0,0257 mg/kg dry weight (d.w.)

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.
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 pro-

tection if there is a splash hazard.

Equipment should conform to EN 166

Hand protection

Material	:	Nitrile rubber
Break through time	:	240 min
Glove thickness	:	0,2 mm
Material	:	Nitrile rubber
Break through time	:	480 min
Glove thickness	:	0,40 mm
Material	:	butyl-rubber
Break through time	:	480 min
Glove thickness	:	0,47 mm
Guideline	:	Equipment should conform to EN 374
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. Respirator with combination filter for vapour/particulate (EN 141)
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

Physical state	:	liquid
Form	:	liquid
Colour	:	colourless
Odour	:	very faint, ester-like
Odour Threshold	:	No data available
Melting point/freezing point	:	< -30 °C
Initial boiling point and boiling range	:	Decomposition: Decomposes below the boiling point.
Flammability	:	Not applicable Organic peroxide
Upper explosion limit / Upper flammability limit	:	Upper explosion limit not determined
Lower explosion limit / Lower flammability limit	:	Lower explosion limit not determined
Flash point	:	Above the SADT value., No flash point was obtained, but the product may release flammable vapour.
Auto-ignition temperature	:	not determined
Self-Accelerating decomposition temperature (SADT)	:	60 °C Method: UN-Test H.4 SADT-Self Accelerating Decomposition Temperature. Lowest temperature at which the tested package size will undergo a self-accelerating decomposition reaction.
pH	:	substance/mixture is non-soluble (in water)

Viscosity
Viscosity, dynamic : 6,19 mPa.s (20 °C)

Viscosity, kinematic : not determined

Solubility(ies)
Water solubility : 5,39 mg/l (20 °C)
Method: OECD Test Guideline 123
GLP: yes
practically insoluble

Partition coefficient: n-octanol/water : log Pow: 5,2 (25 °C)
Method: OECD Test Guideline 123

Dispersion Stability : not determined

Vapour pressure : < 0,01 hPa (25 °C)

Relative density : 0,927 (20 °C)

Density : 0,927 g/cm3 (20 °C)

Relative vapour density : not determined

9.2 Other information

Explosives : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.
Organic peroxide

Self-ignition : The substance or mixture is not classified as pyrophoric.

Self-heating substances : The substance or mixture is not classified as self heating.

Substances and mixtures, which in contact with water, emit flammable gases : The substance or mixture does not emit flammable gases in contact with water.

Desensitised explosives	:	Not applicable
Evaporation rate	:	No data available
Refractive index	:	1,428 at 20 °C

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions.
Heating may cause a fire or explosion.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions	:	No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid	:	Protect from contamination. Contact with incompatible substances can cause decomposition at or below SADT. Heat, flames and sparks. Avoid confinement.

10.5 Incompatible materials

Materials to avoid	:	Accelerators, strong acids and bases, heavy metals and heavy metal salts, reducing agents

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Not classified due to lack of data.

Product:

Acute oral toxicity	:	LD50 (Rat): > 5.000 mg/kg Method: OECD Test Guideline 401

Assessment: The substance or mixture has no acute oral toxicity

Acute dermal toxicity : LD0 (Rabbit): > 2.000 mg/kg
Method: OECD Test Guideline 402

Components:

tert-Butyl peroxy-2-ethylhexylcarbonate:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg
Method: OECD Test Guideline 401
Assessment: The substance or mixture has no acute oral toxicity

Acute dermal toxicity : LD0 (Rabbit): > 2.000 mg/kg
Method: OECD Test Guideline 402

Skin corrosion/irritation

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

Product:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Mild skin irritation

Remarks : May cause skin irritation and/or dermatitis.

Components:

tert-Butyl peroxy-2-ethylhexylcarbonate:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Mild skin irritation

Serious eye damage/eye irritation

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

Product:

Species : Rabbit
Method : OECD Test Guideline 405
Result : No eye irritation

Remarks : Vapours may cause irritation to the eyes, respiratory system and the skin.

Components:

tert-Butyl peroxy-2-ethylhexylcarbonate:

Species : Rabbit

Method : OECD Test Guideline 405
Result : No eye irritation

Respiratory or skin sensitisation

Skin sensitisation

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

Respiratory sensitisation

Not classified due to lack of data.

Product:

Species : Guinea pig
Method : OECD Test Guideline 406
Result : Does not cause skin sensitisation.

Components:

tert-Butyl peroxy-2-ethylhexylcarbonate:

Species : Guinea pig
Method : OECD Test Guideline 406
Result : Does not cause skin sensitisation.

Germ cell mutagenicity

Not classified due to lack of data.

Product:

Genotoxicity in vitro : Method: OECD Test Guideline 471
Result: positive

Method: OECD Test Guideline 476
Result: positive

Genotoxicity in vivo : Species: Mouse
Application Route: Intraperitoneal injection
Method: OECD Test Guideline 483
Result: negative

Components:

tert-Butyl peroxy-2-ethylhexylcarbonate:

Genotoxicity in vitro : Method: OECD Test Guideline 471
Result: positive

Method: OECD Test Guideline 476
Result: positive

Genotoxicity in vivo : Species: Mouse
Application Route: Intraperitoneal injection
Method: OECD Test Guideline 483

Result: negative

Carcinogenicity

Not classified due to lack of data.

Product:

Remarks : This information is not available.

Components:

tert-Butyl peroxy-2-ethylhexylcarbonate:

Remarks : This information is not available.

Reproductive toxicity

Not classified due to lack of data.

Product:

Effects on fertility : Remarks: No data available

Components:

tert-Butyl peroxy-2-ethylhexylcarbonate:

Effects on fertility : Remarks: No data available

STOT - single exposure

Not classified due to lack of data.

STOT - repeated exposure

Not classified due to lack of data.

Repeated dose toxicity

Product:

Species	:	Rat
NOAEL	:	150 mg/kg
Application Route	:	Ingestion
Exposure time	:	28 d
Method	:	OECD Test Guideline 407

Components:

tert-Butyl peroxy-2-ethylhexylcarbonate:

Species	:	Rat
NOAEL	:	150 mg/kg
Application Route	:	Ingestion
Exposure time	:	28 d
Method	:	OECD Test Guideline 407

Aspiration toxicity

Not classified due to lack of data.

Product:

No data available

Components:

tert-Butyl peroxy-2-ethylhexylcarbonate:

No data available

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : 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.

Further information

Product:

Remarks : No data available

SECTION 12: Ecological information

12.1 Toxicity

Components:

tert-Butyl peroxy-2-ethylhexylcarbonate:

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): > 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 0,214 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 NOEC (Pseudokirchneriella subcapitata (green algae)): 0,109 mg/l

Exposure time: 72 h
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : 1

Toxicity to microorganisms : EC50 (Bacteria): > 1.000 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209

12.2 Persistence and degradability

Components:

tert-Butyl peroxy-2-ethylhexylcarbonate:

Biodegradability : Result: rapidly biodegradable
Method: OECD Test Guideline 301D

12.3 Bioaccumulative potential

Components:

tert-Butyl peroxy-2-ethylhexylcarbonate:

Partition coefficient: n-octanol/water : log Pow: 5,2 (25 °C)
Method: OECD Test Guideline 123

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 Endocrine disrupting properties

Product:

Assessment : 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.

No data available

12.7 Other adverse effects

Product:

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

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. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.
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 or ID number

ADN	:	UN 3105
ADR	:	UN 3105
RID	:	UN 3105
IMDG	:	UN 3105
IATA	:	UN 3105

14.2 UN proper shipping name

ADN	:	ORGANIC PEROXIDE TYPE D, LIQUID (tert-BUTYL PEROXY-2-ETHYLHEXYLCARBONATE)
ADR	:	ORGANIC PEROXIDE TYPE D, LIQUID (tert-BUTYL PEROXY-2-ETHYLHEXYLCARBONATE)
RID	:	ORGANIC PEROXIDE TYPE D, LIQUID (tert-BUTYL PEROXY-2-ETHYLHEXYLCARBONATE)

IMDG	:	ORGANIC PEROXIDE TYPE D, LIQUID (tert-BUTYL PEROXY-2-ETHYLHEXYLCARBONATE)
IATA	:	Organic peroxide type D, liquid (tert-Butyl peroxy-2-ethylhexylcarbonate)

14.3 Transport hazard class(es)

		Class	Subsidiary risks
ADN	:	5.2	
ADR	:	5.2	
RID	:	5.2	
IMDG	:	5.2	
IATA	:	5.2	HEAT

14.4 Packing group

ADN

Packing group	:	Not assigned by regulation
Classification Code	:	P1
Labels	:	5.2

ADR

Packing group	:	Not assigned by regulation
Classification Code	:	P1
Labels	:	5.2
Tunnel restriction code	:	(D)

RID

Packing group	:	Not assigned by regulation
Classification Code	:	P1
Hazard Identification Number	:	539
Labels	:	5.2

IMDG

Packing group	:	Not assigned by regulation
Labels	:	5.2
EmS Code	:	F-J, S-R

IATA (Cargo)

Packing instruction (cargo aircraft)	:	570
Packing group	:	Not assigned by regulation
Labels	:	Organic Peroxides, Keep Away From Heat

IATA (Passenger)

Packing instruction (passenger aircraft)	:	570
Packing group	:	Not assigned by regulation
Labels	:	Organic Peroxides, Keep Away From Heat

14.5 Environmental hazards

ADN
Environmentally hazardous : yes

ADR
Environmentally hazardous : yes

RID
Environmentally hazardous : yes

IMDG
Marine pollutant : yes

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.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	:	Conditions of restriction for the following entries should be considered: Number on list 3
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	:	Not applicable
Regulation (EU) No 2024/590 on substances that deplete the ozone layer	:	Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	:	Not applicable
Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals	:	Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	:	Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	P6b	SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES
	E1	ENVIRONMENTAL HAZARDS

Water hazard class (Germany)	:	WGK 2 obviously hazardous to water Remarks: self classification Classification according to AwSV, Annex 1 (4) (German regulatory requirements)

Other regulations:

Gefahrgruppe nach TRGS 741: Ib (German regulatory requirements)

The product is subject to the supply restrictions of the Ordinance on the Prohibition of Chemicals.

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
AIIC (AU)	:	All components are listed on the inventory, regulatory obligations/restrictions apply
DSL (CA)	:	All components of this product are on the Canadian DSL
ENCS (JP)	:	On the inventory, or in compliance with the inventory
ISHL (JP)	:	On the inventory, or in compliance with the inventory
KECI (KR)	:	On the inventory, or in compliance with the inventory
IECSC (CN)	:	On the inventory, or in compliance with the inventory

15.2 Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.
For further information see eSDS.

SECTION 16: Other information

Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - 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 Harmonised 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 Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; 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 - Organisation 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; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

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/

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.

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