

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

TRIGONOX 121

Version 2

Revision Date 19.07.2021

Print Date 14.03.2023

DK / EN

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name : TRIGONOX 121

REACH Registration Number : 01-2119970626-28

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

Use of the Substance/Mixture : Specific use(s): Polymerization initiator

1.3 Details of the supplier of the safety data sheet

Company : Nouryon Functional Chemicals B.V.
Haaksbergweg 88
NL 1101 BZ Amsterdam
Netherlands

Telephone : +31889840367
Telefax :
E-mail address : polymer.emeia@nouryon.com

1.4 Emergency telephone number

Emergency telephone number : 24 hours:+31 57 06 79211, US-CHEMTREC:1-800-424-9300, CA-CANUTEC:1-613-996-6666, JP: +81 (836) 74 8810, CN: 化学事故应急咨询电话 : +86 532 8388 9090

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Organic peroxides, D, H242
Skin sensitisation, 1B, H317
Short-term (acute) aquatic hazard, 1, H400
Long-term (chronic) aquatic hazard, 1, H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Pictogram



Signal word

: Danger

Hazard statements

: H242
H317
H410

Heating may cause a fire.
May cause an allergic skin reaction.
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.
Keep only in original packaging.
Avoid release to the environment.
Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

P234
P273
P280

Response:
P370 + P378

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

P391
Storage:
P411

Store at temperatures not exceeding 20°C/ 68°F.

Hazardous components which must be listed on the label:

tert-Amyl peroxy-2-ethylhexanoate

686-31-7

2.3 Other hazards

No further data available.

PBT and vPvB 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.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Common Name : Organic peroxide
 Pure substance/mixture : Substance

Hazardous substance

Chemical name	PBT vPvB OEL	CAS-No. EC-No. REACH No.	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
tert-Amyl peroxy-2-ethylhexanoate		686-31-7 211-687-3 01-2119970626-28	Org. Perox. D; H242 Skin Sens. 1B; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute): 1 M-Factor (Chronic): 1	>= 95 - <= 100

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice : Move out of dangerous area.
 Consult a physician.
 Show this safety data sheet to the doctor in attendance.

If inhaled : If breathed in, move person into fresh air.
 Consult a physician after significant exposure.

In case of skin contact : Take off contaminated clothing and shoes immediately.
 Rinse immediately with plenty of water.
 If skin irritation persists, call a physician.

In case of eye contact : Rinse with plenty of water.
 Remove contact lenses.
 Protect unharmed eye.
 Keep eye wide open while rinsing.
 If eye irritation persists, consult a specialist.

If swallowed : Clean mouth with water and drink afterwards plenty of water.
 Never give anything by mouth to an unconscious person.
 Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : The symptoms and effects are as expected from the hazards as shown in section 2. No specific product related symptoms are known.

Risks : May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting / Specific hazards arising from the chemical : CAUTION: reignition may occur.
Supports combustion.
Do not use a solid water stream as it may scatter and spread fire.
Water spray may be ineffective unless used by experienced firefighters.
Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous decomposition products formed under fire conditions.

Combustion products : Fire will produce smoke containing hazardous combustion products (see section 10).

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Further information : Use water spray to cool unopened 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 : Use personal protective equipment.
Wear respiratory protection.
Ensure adequate ventilation.
Remove all sources of ignition.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Emergency measures on accidental release : Evacuate personnel to safe areas.
Only qualified personnel equipped with suitable protective equipment may intervene.
Prevent unauthorised persons entering the zone.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.

Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up /
Methods for containment : Soak up with inert absorbent material and dispose of as hazardous waste.
Use only inert inorganic material such as vermiculite or perlite as absorbent.
Keep mixture of absorbent material and spilled product wetted with water.
Confinement must be avoided.
Never return spills in original containers for re-use.

6.4 Reference to other sections

For disposal considerations see section 13.

For personal protection see section 8.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8.
Avoid formation of aerosol.
Do not breathe vapours or spray mist.
Avoid contact with skin.
Smoking, eating and drinking should be prohibited in the application area.
Open drum carefully as content may be under pressure.
Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Use explosion protected equipment.
Keep away from sources of ignition - No smoking.
No sparking tools should be used.
Keep away from reducing agents (e.g. amines), acids, alkalies and heavy metal compounds (e.g. accelerators, driers, metal soaps).
Do not cut or weld on or near this container even when empty.
Keep away from combustible material.

Temperature class : It is recommended to use electrical equipment of temperature group T3. However, autoignition can never be excluded.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : No smoking.
Keep in a well-ventilated place.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.
Keep only in original container.
Store away from other materials.

Minimum storage temperature: : Avoid temperatures below: -20 °C

Maximum storage temperature: : 5 °C

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- Other data : If product freezes or separates, contact the manufacturer.
- : Maximum storage temperature is for quality only.
- : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

- Specific use(s) : Consult the technical guidelines for the use of this substance/mixture.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Contains no substances with occupational exposure limit values.

Occupational exposure limits of decomposition products

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
tert-Amyl alcohol, tert-Amyl alcohol	75-85-4	GV	100 ppm 360 mg/m ³	DK OEL
Further information: Guiding list of organic solvents.				
Heptane	142-82-5	TWA	500 ppm 2 085 mg/m ³	2000/39/EC
Further information: Indicative				
		GV	200 ppm 820 mg/m ³	DK OEL
Further information: Guiding list of organic solvents.				
		TWA	400 ppm	ACGIH
		STEL	500 ppm	ACGIH
Acetone	67-64-1	TWA	500 ppm 1 210 mg/m ³	2000/39/EC
Further information: Indicative				
		GV	250 ppm 600 mg/m ³	DK OEL
Further information: Guiding list of organic solvents.				
		TWA	250 ppm	ACGIH
		STEL	500 ppm	ACGIH
		TWA	250 ppm	ACGIH
		STEL	500 ppm	ACGIH
Carbon dioxide	124-38-9	TWA	5 000 ppm 9 000 mg/m ³	2006/15/EC
Further information: Indicative				
		GV	5 000 ppm 9 000 mg/m ³	DK OEL
		TWA	5 000 ppm	ACGIH
		STEL	30 000 ppm	ACGIH

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

Substance name	End Use	Exposure routes	Potential health effects	Value
tert-Amyl peroxy-2-ethylhexanoate	Workers	Inhalation	Long-term systemic effects	15,87 mg/m ³

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	Workers	Dermal	Long-term systemic effects	9 mg/kg bw/day
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Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
tert-Amyl peroxy-2-ethylhexanoate	Fresh water	0,00046 mg/l
	Marine water	0,000046 mg/l
	Intermittent water	0,0028 mg/l
	Sewage treatment plant	10 mg/l
	Fresh water sediment	81,6 µg/kg dry weight
	Marine sediment	8,16 µg/kg dry weight
	Soil	13,7 µg/kg dry weight

8.2 Exposure controls

Engineering measures

Explosion proof ventilation recommended.
Effective exhaust ventilation system

Personal protective equipment

Eye protection : Tightly fitting safety goggles

Hand protection

Material : Neoprene

Material : Nitrile rubber

Skin and body protection : Protective suit

Respiratory protection : In the case of vapour or aerosol formation use a respirator with an approved filter.
Filter A

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.
Wash contaminated clothing before re-use.

Environmental exposure controls

General advice : Prevent product from entering drains.
Discharge into the environment must be avoided.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state : Clear liquid

Colour : colourless

Odour : Faint.

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Odour Threshold	:	No data available
Melting point	:	<= -20 °C
Boiling point/boiling range	:	Decomposes below the boiling point.
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	Above the SADT value
Auto-ignition temperature	:	Test method not applicable
Decomposition temperature	:	
Decomposition temperature	:	SADT - (Self accelerating decomposition temperature) is the lowest temperature at which self accelerating decomposition may occur with a substance in the packaging as used in transport. A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at and above the SADT. Contact with incompatible substances can cause decomposition below the SADT.
Self-Accelerating decomposition temperature (SADT)	:	35 °C
pH	:	Weakly acidic
Viscosity	:	
Viscosity, dynamic	:	9 mPa.s (0 °C)
Viscosity, kinematic	:	9,85 mm ² /s (0 °C)
Solubility(ies)	:	
Water solubility	:	immiscible
Solubility in other solvents	:	miscible with most organic solvents
Partition coefficient: n-octanol/water	:	log Pow: 4,56 (25 °C) Method: OECD Test Guideline 123
Vapour pressure	:	< 1,1 hPa (75 °C)
Relative density	:	0,914 (0 °C)
Bulk density	:	Not applicable
Relative vapour density	:	No data available

9.2 Other information

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Explosives	: Not explosive
Oxidizing properties	: Not classified as oxidising.
Flammability (liquids)	: Decomposition products may be flammable.
Evaporation rate	: No data available
Active Oxygen Content	: 6,6 %
Organic peroxides	: 95 %

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Stable under normal conditions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : Confinement must be avoided.
Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Contact with the following incompatible materials will result in hazardous decomposition:
Acids and bases
Iron
Copper
Reducing agents
Heavy metals
Rust
Do not mix with peroxide accelerators, unless under controlled processing.
Use only stainless steel 316, PP, polyethylene or glass-lined equipment.
For queries regarding the suitability of other materials please contact the supplier.

10.6 Hazardous decomposition products

Hazardous decomposition products : tert-Amyl alcohol
Heptane
Acetone
Carbon dioxide
Methane
Carbon oxides
Ethane

3-(1,1-Dimethylpropoxy)heptane

Thermal decomposition : SADT - (Self accelerating decomposition temperature) is the lowest temperature at which self accelerating decomposition may occur with a substance in the packaging as used in transport. A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at and above the SADT. Contact with incompatible substances can cause decomposition below the SADT.

Self-Accelerating decomposition temperature (SADT) : 35 °C

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Product information:

Acute toxicity : Not classified based on available information.

Skin corrosion/irritation : Not classified based on available information.

Serious eye damage/eye irritation : Not classified based on available information.

Respiratory or skin sensitisation : Respiratory sensitisation: Not classified based on available information.
Skin sensitisation: May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified based on available information.

Carcinogenicity : Not classified based on available information.

Reproductive toxicity : Not classified based on available information.

STOT - single exposure : Not classified based on available information.

STOT - repeated exposure : Not classified based on available information.

Aspiration hazard : Not classified based on available information.

Further information : No further data available.

Test result

Respiratory or skin sensitisation : Maximisation Test
Species: Guinea pig
Classification: The product is a skin sensitiser, sub-category 1B.
Method: OECD Test Guideline 406

Toxicology data for the components: tert-Amyl peroxy-2-ethylhexanoate

Acute toxicity:

Acute oral toxicity : LD0: > 5 000 mg/kg
Species: Rat

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	Method: OECD Test Guideline 401 Test substance: yes
Acute inhalation toxicity	: LC50 (Rat, male and female): 42,2 mg/l Exposure time: 4 h Test atmosphere: aerosol Method: OECD Test Guideline 403 Read-across from supporting substance (structural analogue or surrogate). Test substance: no
Acute dermal toxicity	: LD0: > 2 000 mg/kg Species: Rabbit Method: OECD Test Guideline 402 Test substance: yes
Skin corrosion/irritation	: Species: Rabbit Result: No skin irritation Classification: No skin irritation Exposure time: 24 h Test substance:yes
Serious eye damage/eye irritation	: Species: Rabbit Result: No eye irritation Classification: No eye irritation Exposure time: 24 h Test substance: yes
Respiratory or skin sensitisation	: Maximisation Test Species: Guinea pig Classification: The product is a skin sensitiser, sub-category 1B. Method: OECD Test Guideline 406
Repeated dose toxicity	: Species: Rat, male and female NOAEL: 450 mg/kg bw/day Application Route: Oral Method: OECD Test Guideline 408 GLP: yes
Germ cell mutagenicity	
Genotoxicity in vitro	: Ames test Salmonella typhimurium Result: negative Method: OECD Test Guideline 471 Test substance: yes In vitro gene mutation study in mammalian cells mouse lymphoma cells Result: negative Method: OECD Test Guideline 476 Test substance: yes
Genotoxicity in vivo	: In vivo micronucleus test Species: Mouse Method: OECD Test Guideline 474

Dose: 500, 1000, 2000 mg/kg
Exposure time: 24 h
Result: negative
Test substance: yes

Reproductive toxicity/Fertility : Test Type: reproductive and developmental toxicity study
Species: Rat, male and female
Strain: Wistar
Application Route: Oral
Dose: 0, 100, 300, 1000 mg/kg bw/day
Frequency of Treatment: 1 daily
General Toxicity - Parent: No observed adverse effect level:
300 mg/kg bw/day
Early Embryonic Development: No observed adverse effect
level: 300 mg/kg body weight
Method: OECD Test Guideline 421
GLP: yes
Read-across from supporting substance (structural analogue
or surrogate).

Test Type: reproductive and developmental toxicity study
Species: Rat, male
Application Route: Oral
Dose: 50, 250, 1000 mg/kg bw/day
Frequency of Treatment: 1 daily
General Toxicity - Parent: No observed adverse effect level: 1
000 mg/kg bw/day
Fertility: No observed adverse effect level: 1 000 mg/kg
bw/day
Early Embryonic Development: No observed adverse effect
level: 250 mg/kg bw/day
Method: OECD Test Guideline 421
GLP: yes

Test Type: reproductive and developmental toxicity study
Species: Rat, female
Application Route: Oral
Dose: 50, 250, 1000 mg/kg bw/day
Frequency of Treatment: 1 daily
General Toxicity - Parent: No observed adverse effect level:
250 mg/kg bw/day
Fertility: No observed adverse effect level: 250 mg/kg bw/day
Early Embryonic Development: No observed adverse effect
level: 250 mg/kg bw/day
Method: OECD Test Guideline 421
GLP: yes

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.

SECTION 12: ECOLOGICAL INFORMATION

Product information:

Ecotoxicology Assessment

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

12.1 Toxicity

Test result

M-Factor (Acute) : 1

M-Factor (Acute)

M-Factor (Chronic) :

M-Factor (Chronic) 1

Components:

Ecotoxicology Assessment

tert-Amyl peroxy-2-ethylhexanoate

Short-term (acute) aquatic hazard : Very toxic to aquatic life.

Long-term (chronic) aquatic hazard : Very toxic to aquatic life with long lasting effects.

Test result

tert-Amyl peroxy-2-ethylhexanoate

Toxicity to fish : LC50: 8,66 mg/l
Exposure time: 96 h
Species: Poecilia reticulata (guppy)
Test Type: semi-static test
Method: OECD Test Guideline 203
Test substance: yes

NOEC: 2,1 mg/l
Exposure time: 96 h
Species: Poecilia reticulata (guppy)
Test Type: semi-static test
Method: OECD Test Guideline 203
Test substance: yes

Toxicity to daphnia and other aquatic invertebrates : EC50: 3,7 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
Test Type: Immobilization
Analytical monitoring: yes
Method: OECD Test Guideline 202
Test substance: yes

Toxicity to algae : ErC50: 0,28 mg/l
Exposure time: 72 h
Species: Pseudokirchneriella subcapitata (green algae)
Test Type: Growth inhibition
Analytical monitoring: yes

Method: OECD Test Guideline 201

Test substance: yes

EC10: 0,023 mg/l

Exposure time: 72 h

Species: Pseudokirchneriella subcapitata (green algae)

Test Type: Growth inhibition

Analytical monitoring: yes

Method: OECD Test Guideline 201

Test substance: yes

M-Factor (Acute) : 1

M-Factor (Chronic) : 1

Toxicity to bacteria : EC50: > 1 000 mg/l
Exposure time: 3 h
Species: activated sludge
Test Type: Respiration inhibition
Analytical monitoring: not required
Method: OECD Test Guideline 209
Test substance: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EC50: 1,02 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Test Type: semi-static test
Analytical monitoring: yes
Method: OECD Test Guideline 211

12.2 Persistence and degradability

Product information : No information available.

Components:

tert-Amyl peroxy-2-ethylhexanoate

Biodegradability : Test Type: Ready biodegradability
Inoculum: activated sludge
Concentration: 2 mg/l
Result: Readily biodegradable.
Biodegradation: 62 %
Exposure time: 28 d
Method: OECD Test Guideline 301D
GLP: yes
The 10 day time window criterion is not fulfilled.
Test substance: yes

12.3 Bioaccumulative potential

Product information : No information available.

Components:

tert-Amyl peroxy-2-ethylhexanoate

Bioaccumulation : Bioconcentration factor (BCF): 682
Method: QSAR
No bioaccumulation is expected.

12.4 Mobility in soil

Product information : No information available.

Components:

tert-Amyl peroxy-2-ethylhexanoate

Mobility : No data available

Distribution among environmental compartments : Absorption / desorption
log Koc: 3,24
Method: OECD Test Guideline 121

12.5 Results of PBT and vPvB assessment

Product information:

PBT and vPvB 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 information:

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.

12.7 Other adverse effects

Product information : No information available.

Components:

tert-Amyl peroxy-2-ethylhexanoate

Biochemical Oxygen Demand (BOD) : No data available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product : 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.
Dispose of contents/container in accordance with local regulation.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not burn, or use a cutting torch on, the empty drum.
Due to the high risk of contamination recycling/recovery is not recommended.
Follow all warnings even after the container is emptied.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

ADN	: UN 3115
ADR	: UN 3115
RID	: UN 3115 (Not permitted for transport)
IMDG-Code	: UN 3115
IATA-DGR	: UN 3115 (Not permitted for transport)

14.2 Proper shipping name

ADN	: ORGANIC PEROXIDE TYPE D, LIQUID, TEMPERATURE CONTROLLED (tert-Amyl peroxy-2-ethylhexanoate)
ADR	: ORGANIC PEROXIDE TYPE D, LIQUID, TEMPERATURE CONTROLLED (tert-Amyl peroxy-2-ethylhexanoate)
RID	: ORGANIC PEROXIDE TYPE D, LIQUID, TEMPERATURE CONTROLLED (Not permitted for transport)
IMDG-Code	: ORGANIC PEROXIDE TYPE D, LIQUID, TEMPERATURE CONTROLLED (tert-Amyl peroxy-2-ethylhexanoate)
IATA-DGR	: Organic peroxide type D, liquid, temperature controlled (Not permitted for transport)

14.3 Transport hazard class

ADN	: 5.2
ADR	: 5.2
RID	: Not permitted for transport
IMDG-Code	: 5.2
IATA-DGR	: Not permitted for transport

14.4 Packing group

ADN	
Packing group	: Not Assigned
Classification Code	: P2
Labels	: 5.2
ADR	
Packing group	: Not Assigned
Classification Code	: P2
Labels	: 5.2
Tunnel restriction code	: (D)
RID	: Not permitted for transport
IMDG-Code	
Packing group	: Not Assigned
Labels	: 5.2
EmS Code	: F-F, S-R
Remarks	: The control temperature is the maximum temperature at which the formulation can be transported safely during a prolonged period of time.
IATA-DGR	
(Cargo)	: Not permitted for transport
IATA-DGR	
(Passenger)	: Not permitted for transport
Packing group	: Not Assigned

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Labels : 5.2
Remarks : The control temperature is the maximum temperature at which the formulation can be transported safely during a prolonged period of time.

14.5 Environmental hazards

ADN

Environmentally hazardous : yes

ADR

Environmentally hazardous : yes

RID : ORGANIC PEROXIDE TYPE D, LIQUID, TEMPERATURE CONTROLLED (Not permitted for transport)

IMDG-Code

Marine pollutant : yes (tert-Amyl peroxy-2-ethylhexanoate)

IATA-DGR : Organic peroxide type D, liquid, temperature controlled (Not permitted for transport)

14.6 Special precautions for user

Control temperature : 20 °C

Emergency temperature : 25 °C

Remarks : The control temperature is the maximum temperature at which the formulation can be transported safely during a prolonged period of time.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations 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

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

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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

Notification status

TCSI : YES. On the inventory, or in compliance with the inventory
TSCA : YES. All substances listed as active on the TSCA inventory
AIIIC : YES. On the inventory, or in compliance with the inventory
DSL : YES. All components of this product are on the Canadian DSL
ENCS : YES. On the inventory, or in compliance with the inventory
ISHL : YES. On the inventory, or in compliance with the inventory
KECI : YES. On the inventory, or in compliance with the inventory
PICCS : YES. On the inventory, or in compliance with the inventory
IECSC : YES. On the inventory, or in compliance with the inventory
NZIoC : NO. Not in compliance with the inventory

For explanation of abbreviation see section 16.

15.2 Chemical safety assessment

Product information : No information available.

tert-Amyl peroxy-2-ethylhexanoate : A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

H242 : Heating may cause a fire.
H317 : May cause an allergic skin reaction.
H400 : Very toxic to aquatic life.
H410 : Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

2000/39/EC : Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values
2006/15/EC : Europe. Indicative occupational exposure limit values
ACGIH : USA. ACGIH Threshold Limit Values (TLV)
DK OEL : Denmark. Occupational Exposure Limits
2000/39/EC / TWA : Limit Value - eight hours
2006/15/EC / TWA : Limit Value - eight hours
ACGIH / TWA : 8-hour, time-weighted average
ACGIH / STEL : Short-term exposure limit
DK OEL / GV : Long term exposure limit

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European 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; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

This data sheet contains changes from the previous version in section(s):

Hazards identification

Composition/information on ingredients

Toxicological information

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.