

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### TRIGONOX 117

Version	Revision Date:	BG / EN	Date of last issue: 22.12.2021
2.1	05.05.2023		Date of first issue: 28.04.2015

---

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

### 1.1 Product identifier

Trade name : TRIGONOX 117

Substance name : tert-Butylperoxy 2-ethylhexyl carbonate

EC-No. : 252-029-5

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

Use of the Substance/Mixture : 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

E-mail address of person responsible for the SDS : 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, 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.

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### TRIGONOX 117

Version	Revision Date:	BG / EN	Date of last issue: 22.12.2021
2.1	05.05.2023		Date of first issue: 28.04.2015

---

#### 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-Butylperoxy 2-ethylhexyl carbonate  
EC-No. : 252-029-5

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### TRIGONOX 117

Version	Revision Date:	BG / EN	Date of last issue: 22.12.2021
2.1	05.05.2023		Date of first issue: 28.04.2015

Synonyms : tert-Butylperoxy 2-ethylhexyl carbonate

#### Components

Chemical name	CAS-No. EC-No.	Concentration (% w/w)	M-Factor, SCL, ATE
tert-Butylperoxy 2-ethylhexyl carbonate	34443-12-4 252-029-5	>= 95 - <= 100	M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 1

## 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.
- 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.  
If symptoms persist, call a physician.

### 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.

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

- Treatment : Treat symptomatically.

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### TRIGONOX 117

Version	Revision Date:	BG / EN	Date of last issue: 22.12.2021
2.1	05.05.2023		Date of first issue: 28.04.2015

---

## 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 : 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.
- Hazardous 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 : Ensure adequate ventilation.  
Remove all sources of ignition.  
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.  
Evacuate personnel to safe areas.  
Only qualified personnel equipped with suitable protective equipment may intervene.

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### TRIGONOX 117

Version	Revision Date:	BG / EN	Date of last issue: 22.12.2021
2.1	05.05.2023		Date of first issue: 28.04.2015

---

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 material for containment and cleaning up

Methods for cleaning up : 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.  
Do not smoke.  
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, alkalis 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.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

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

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### TRIGONOX 117

Version 2.1      Revision Date: 05.05.2023      BG / EN      Date of last issue: 22.12.2021  
Date of first issue: 28.04.2015

#### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : No smoking. Electrical installations / working materials must comply with the technological safety standards. Keep only in original container. Store away from other materials.

Further information on storage stability : No decomposition if stored and applied as directed.

Maximum storage temperature is for quality only.

Maximum storage temperature: : 20 °C

#### 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
Solvent	104-76-7	TWA	1 ppm 5,4 mg/m <sup>3</sup>	2017/164/EU
	Further information: Indicative			
		TWA	1 ppm 5,4 mg/m <sup>3</sup>	BG OEL
Carbon dioxide	124-38-9	TWA	5.000 ppm 9.000 mg/m <sup>3</sup>	2006/15/EC
	Further information: Indicative			
		TWA	5.000 ppm 9.000 mg/m <sup>3</sup>	BG OEL

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

Substance name	End Use	Exposure routes	Potential health effects	Value
tert-Butylperoxy 2-ethylhexyl carbonate	Workers	Dermal	Long-term systemic effects	84 mg/kg bw/day
	Workers	Inhalation	Long-term systemic effects	59,2 mg/m <sup>3</sup>
	Consumers	Inhalation	Long-term systemic effects	10,4 mg/m <sup>3</sup>

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### TRIGONOX 117

Version 2.1      Revision Date: 05.05.2023      BG / EN      Date of last issue: 22.12.2021  
Date of first issue: 28.04.2015

	Consumers	Dermal	Long-term systemic effects	30 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	3 mg/kg bw/day

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

Substance name	Environmental Compartment	Value
tert-Butylperoxy 2-ethylhexyl carbonate	Fresh water	0,0021 mg/l
	Marine water	0,00021 mg/l
	Fresh water sediment	129,7 µg/kg dry weight
	Marine sediment	13,0 µg/kg dry weight
	Sewage treatment plant	3,16 mg/l
	Soil	25,7 µg/kg dry weight

## 8.2 Exposure controls

### Engineering measures

Explosion proof ventilation recommended.  
Effective exhaust ventilation system

### Personal protective equipment

Eye/face protection : Tightly fitting safety goggles

Hand protection

Material : Neoprene

Material : Nitrile rubber

Skin and body protection : Protective suit

Respiratory protection : Filter A

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state : liquid

Colour : colourless

Odour : Faint.

Odour Threshold : No data available

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### TRIGONOX 117

Version	Revision Date:	BG / EN	Date of last issue: 22.12.2021
2.1	05.05.2023		Date of first issue: 28.04.2015

---

Melting point	:	< -50 °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	:	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)	:	60 °C
pH	:	Not applicable
Viscosity		
Viscosity, dynamic	:	5,8 mPa.s (20 °C)
Viscosity, kinematic	:	6,24 mm <sup>2</sup> /s (20 °C)
Solubility(ies)		
Water solubility	:	(20 °C) immiscible
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	log Pow: 4,66
Vapour pressure	:	not determined
Relative density	:	0,93 (20 °C)



## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### TRIGONOX 117

Version 2.1	Revision Date: 05.05.2023	BG / EN	Date of last issue: 22.12.2021 Date of first issue: 28.04.2015
----------------	------------------------------	---------	---

Bulk density : Not applicable

Relative vapour density : No data available

#### 9.2 Other information

Explosives : Not explosive

Oxidizing properties : Not classified as oxidising.

Flammability (liquids) : Decomposition products may be flammable.

Evaporation rate : No data available

Organic peroxides : > 95 %

## 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

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.

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### TRIGONOX 117

Version	Revision Date:	BG / EN	Date of last issue: 22.12.2021
2.1	05.05.2023		Date of first issue: 28.04.2015

---

#### 10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

Hazardous decomposition products : Solvent  
tert-Butanol  
Carbon dioxide

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) : 60 °C

---

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

Not classified based on available information.

#### Components:

##### **tert-Butylperoxy 2-ethylhexyl carbonate:**

Acute oral toxicity : LD0 (Rat, male and female): > 5.000 mg/kg  
Method: OECD Test Guideline 401  
GLP: yes

Acute dermal toxicity : LD0 (Rabbit, male and female): > 2.000 mg/kg  
Method: OECD Test Guideline 402  
GLP: yes  
Assessment: The substance or mixture has no acute dermal toxicity

#### **Skin corrosion/irritation**

Not classified based on available information.

#### Components:

##### **tert-Butylperoxy 2-ethylhexyl carbonate:**

Species : Rabbit

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### TRIGONOX 117

Version	Revision Date:	BG / EN	Date of last issue: 22.12.2021
2.1	05.05.2023		Date of first issue: 28.04.2015

---

Exposure time	:	4 h
Assessment	:	Causes mild skin irritation.
Method	:	OECD Test Guideline 404
Result	:	Mild skin irritation
GLP	:	yes

#### Serious eye damage/eye irritation

Not classified based on available information.

#### Components:

##### **tert-Butylperoxy 2-ethylhexyl carbonate:**

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	Slightly irritating to eyes.
GLP	:	yes

#### Respiratory or skin sensitisation

##### **Skin sensitisation**

Not classified based on available information.

##### **Respiratory sensitisation**

Not classified based on available information.

#### Components:

##### **tert-Butylperoxy 2-ethylhexyl carbonate:**

Test Type	:	Maximisation Test
Species	:	Guinea pig
Assessment	:	Does not cause skin sensitisation.
Method	:	OECD Test Guideline 406
GLP	:	yes

#### Germ cell mutagenicity

Not classified based on available information.

#### Components:

##### **tert-Butylperoxy 2-ethylhexyl carbonate:**

Genotoxicity in vitro	:	Test Type: Microbial mutagenesis assay (Ames test) Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: positive GLP: yes
-----------------------	---	---

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### TRIGONOX 117

Version	Revision Date:	BG / EN	Date of last issue: 22.12.2021
2.1	05.05.2023		Date of first issue: 28.04.2015

---

Test Type: In vitro mammalian cell gene mutation test  
 Test system: mouse lymphoma cells  
 Metabolic activation: with and without metabolic activation  
 Method: OECD Test Guideline 476  
 Result: positive  
 GLP: yes

Genotoxicity in vivo : Test Type: In vivo mammalian alkaline comet assay  
 Species: Rat (male and female)  
 Application Route: Oral  
 Method: OECD Test Guideline 489  
 Result: negative  
 GLP: yes

Test Type: Micronucleus test  
 Species: Mouse (male and female)  
 Application Route: Intraperitoneal  
 Method: OECD Test Guideline 474  
 Result: negative  
 GLP: yes

Test Type: Micronucleus test  
 Species: Mouse (male and female)  
 Application Route: Oral  
 Method: OECD Test Guideline 474  
 Result: negative  
 GLP: yes

#### **Carcinogenicity**

Not classified based on available information.

#### **Reproductive toxicity**

Not classified based on available information.

#### **Components:**

##### **tert-Butylperoxy 2-ethylhexyl carbonate:**

Effects on foetal development : Test Type: Pre-natal  
 Species: Rat, females  
 Strain: Sprague-Dawley  
 Application Route: Oral  
 General Toxicity Maternal: NOAEL: > 1.000 mg/kg bw/day  
 Embryo-foetal toxicity: NOAEL: > 1.000 mg/kg bw/day  
 Method: OECD Test Guideline 414  
 GLP: yes

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### TRIGONOX 117

Version	Revision Date:	BG / EN	Date of last issue: 22.12.2021
2.1	05.05.2023		Date of first issue: 28.04.2015

---

#### STOT - single exposure

Not classified based on available information.

#### STOT - repeated exposure

Not classified based on available information.

#### Repeated dose toxicity

##### Components:

##### **tert-Butylperoxy 2-ethylhexyl carbonate:**

Species	: Rat, male and female
NOAEL	: 600 mg/kg bw/day
NOAEL	: 1.000 mg/kg
Application Route	: Oral
Exposure time	: 90 d
Control Group	: yes
Method	: OECD Test Guideline 408
GLP	: yes
Target Organs	: Kidney
Symptoms	: No adverse effects

Species	: Rat, male and female
NOAEL	: 1000 mg/kg bw/day
Application Route	: Oral
Exposure time	: 28 d
Control Group	: yes
Method	: OECD Test Guideline 407
GLP	: yes
Target Organs	: Systemic toxicity
Symptoms	: No adverse effects

#### Aspiration toxicity

Not classified based on available information.

#### 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.
------------	---

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### TRIGONOX 117

Version	Revision Date:	BG / EN	Date of last issue: 22.12.2021
2.1	05.05.2023		Date of first issue: 28.04.2015

---

#### Further information

##### Product:

Remarks : No further data available.

---

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Components:

##### **tert-Butylperoxy 2-ethylhexyl carbonate:**

- |   |   |   |
|---|---|---|
| Toxicity to fish                                    | : | LC50 (Danio rerio (zebra fish)): > 100 mg/l<br>Exposure time: 96 h<br>Test Type: semi-static test<br>Method: OECD Test Guideline 203<br>GLP: yes                        |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): > 100 mg/l<br>Exposure time: 48 h<br>Test Type: static test<br>Method: OECD Test Guideline 202<br>GLP: yes                           |
| Toxicity to algae/aquatic plants                    | : | EC10 (Pseudokirchneriella subcapitata (green algae)): 0,109 mg/l<br>Exposure time: 72 h<br>Test Type: Growth inhibition<br>Method: OECD Test Guideline 201<br>GLP: yes  |
|   |   | ErC50 (Pseudokirchneriella subcapitata (green algae)): 0,214 mg/l<br>Exposure time: 72 h<br>Test Type: Growth inhibition<br>Method: OECD Test Guideline 201<br>GLP: yes |
| M-Factor (Acute aquatic toxicity)                   | : | 1   |
| Toxicity to microorganisms                          | : | EC50 (activated sludge): > 1.000 mg/l<br>Exposure time: 3 h<br>Test Type: Respiration inhibition<br>Method: Domestic OECD Guideline 209<br>GLP: yes                     |

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### TRIGONOX 117

Version	Revision Date:	BG / EN	Date of last issue: 22.12.2021
2.1	05.05.2023		Date of first issue: 28.04.2015

---

M-Factor (Chronic aquatic toxicity) : 1

#### 12.2 Persistence and degradability

##### Components:

##### **tert-Butylperoxy 2-ethylhexyl carbonate:**

Biodegradability : Test Type: Ready biodegradability  
 Inoculum: activated sludge, non-adapted  
 Concentration: 2 mg/l  
 Result: Readily biodegradable.  
 Biodegradation: 67 %  
 Exposure time: 28 d  
 Method: OECD Test Guideline 301D  
 GLP: yes

#### 12.3 Bioaccumulative potential

##### Components:

##### **tert-Butylperoxy 2-ethylhexyl carbonate:**

Partition coefficient: n-octanol/water : log Pow: 5,2 (25 °C)  
 pH: 6,86

#### 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.

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### TRIGONOX 117

Version	Revision Date:	BG / EN	Date of last issue: 22.12.2021
2.1	05.05.2023		Date of first issue: 28.04.2015

---

#### 12.7 Other adverse effects

**Product:**

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

---

### 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 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-Butylperoxy 2-ethylhexyl carbonate)

**ADR** : ORGANIC PEROXIDE TYPE D, LIQUID  
(tert-Butylperoxy 2-ethylhexyl carbonate)

**RID** : ORGANIC PEROXIDE TYPE D, LIQUID  
(tert-Butylperoxy 2-ethylhexyl carbonate)

**IMDG** : ORGANIC PEROXIDE TYPE D, LIQUID



## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### TRIGONOX 117

Version	Revision Date:	BG / EN	Date of last issue: 22.12.2021
2.1	05.05.2023		Date of first issue: 28.04.2015

---

**IATA** : (tert-Butylperoxy 2-ethylhexyl carbonate)  
 Organic peroxide type D, liquid  
 (tert-Butylperoxy 2-ethylhexyl carbonate)

#### 14.3 Transport hazard class(es)

	Class	Subsidiary risks
<b>ADN</b>	: 5.2	
<b>ADR</b>	: 5.2	
<b>RID</b>	: 5.2	
<b>IMDG</b>	: 5.2	
<b>IATA</b>	: 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

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### TRIGONOX 117

Version	Revision Date:	BG / EN	Date of last issue: 22.12.2021
2.1	05.05.2023		Date of first issue: 28.04.2015

---

#### 14.5 Environmental hazards

##### ADN

Environmentally hazardous : yes

##### ADR

Environmentally hazardous : yes

##### RID

Environmentally hazardous : yes

##### IMDG

Marine pollutant : yes

##### IATA (Passenger)

Environmentally hazardous : yes

##### IATA (Cargo)

Environmentally hazardous : yes

#### 14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only. 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 (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

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### TRIGONOX 117

Version	Revision Date:	BG / EN	Date of last issue: 22.12.2021
2.1	05.05.2023		Date of first issue: 28.04.2015

---

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

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

TCSI : On the inventory, or in compliance with the inventory

TSCA : All substances listed as active on the TSCA inventory

AIC : All components are listed on the inventory, regulatory obligations/restrictions apply

DSL : All components of this product are on the Canadian DSL

ENCS : On the inventory, or in compliance with the inventory

ISHL : On the inventory, or in compliance with the inventory

KECI : On the inventory, or in compliance with the inventory

PICCS : Not in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

NZIoC : On the inventory, or in compliance with the inventory

TECI : Not in compliance with the inventory

#### 15.2 Chemical safety assessment

tert-Butylperoxy 2-ethylhexyl carbonate : A Chemical Safety Assessment has been carried out for this substance.

---

#### SECTION 16: Other information

##### Full text of other abbreviations

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### TRIGONOX 117

Version	Revision Date:	BG / EN	Date of last issue: 22.12.2021
2.1	05.05.2023		Date of first issue: 28.04.2015

---

2006/15/EC	:	Europe. Indicative occupational exposure limit values
2017/164/EU	:	Europe. Commission Directive 2017/164/EU establishing a fourth list of indicative occupational exposure limit values
BG OEL	:	Bulgaria. Ordinance on the Protection of Workers from Risks related to Exposure to Chemical Agents at Work.
2006/15/EC / TWA	:	Limit Value - eight hours
2017/164/EU / TWA	:	Limit Value - eight hours
BG OEL / TWA	:	8-hr Limit

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; 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 data sheet contains changes from the previous version in section(s): Hazards identification Composition/information on ingredients Toxicological information
-------------------	---	--

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

### TRIGONOX 117

Version	Revision Date:	BG / EN	Date of last issue: 22.12.2021
2.1	05.05.2023		Date of first issue: 28.04.2015

---

#### Ecological information

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

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.

BG / EN