

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## NOROX P-20

Version  
1.0

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### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : NOROX P-20

Chemical nature : Organic Peroxide  
Liquid mixture

#### Manufacturer or supplier's details

Company : Shanghai United Initiators Trading Co. Ltd.  
1702, Asia Mansion

Address : 650 Han Kou Road  
Shanghai, China 200001

Telephone : +86 21 34293909

Emergency telephone number : +86 21 34293909

E-mail address : cs-initiators.cn@united-in.com

#### Recommended use of the chemical and restrictions on use

Recommended use : polymerisation initiators

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

**Appearance** : liquid  
**Colour** : light yellow  
**Odour** : ester-like

Flammable liquid and vapour. Heating may cause a fire. May be harmful if swallowed or in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Toxic if inhaled. Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

#### GHS Classification

Flammable liquids : Category 3

Organic peroxides : Type C

Acute toxicity (Oral) : Category 5

Acute toxicity (Inhalation) : Category 3

Acute toxicity (Dermal) : Category 5

Skin corrosion/irritation : Category 2

Skin sensitisation : Category 1

Acute aquatic toxicity : Category 1

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Chronic aquatic toxicity : Category 3

### GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H226 Flammable liquid and vapour.  
H242 Heating may cause a fire.  
H303 + H313 May be harmful if swallowed or in contact with skin.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H331 Toxic if inhaled.  
H400 Very toxic to aquatic life.  
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements :

#### Prevention:

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P220 Keep/Store away from clothing/ strong acids, bases, heavy metal salts and other reducing substances /combustible materials.  
P233 Keep container tightly closed.  
P234 Keep only in original container.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P264 Wash skin thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ eye protection/ face protection.

#### Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor.  
P312 Call a POISON CENTER/doctor if you feel unwell.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.  
P362 + P364 Take off contaminated clothing and wash it before

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reuse.

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

P391 Collect spillage.

### Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P410 Protect from sunlight.

P411 + P235 Store at temperatures not exceeding 30 °C/ 86 °F. Keep cool.

P420 Store away from other materials.

### Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

### Physical and chemical hazards

Flammable liquid and vapour. Heating may cause a fire.

### Health hazards

May be harmful if swallowed. Toxic if inhaled. May be harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction.

### Environmental hazards

Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

### Other hazards which do not result in classification

Vapours may form explosive mixture with air.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

### Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
tert-Butyl perbenzoate	614-45-9	>= 75 - < 80
Acetylacetone	123-54-6	>= 20 - < 25

## 4. FIRST AID MEASURES

General advice : Move out of dangerous area.  
Show this safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.  
Symptoms of poisoning may appear several hours later.  
No artificial respiration, mouth-to-mouth or mouth to nose. Use suitable instruments/apparatus.  
Call a physician immediately.

If inhaled : Call a physician or poison control centre immediately.  
If unconscious, place in recovery position and seek medical advice.  
Keep respiratory tract clear.

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- Call a physician immediately.  
If breathed in, move person into fresh air.  
Contact a poison control center.
- In case of skin contact : 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.  
If symptoms persist, call a physician.
- 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 : Keep respiratory tract clear.  
Call a physician immediately.  
Rinse mouth thoroughly with water.
- Most important symptoms and effects, both acute and delayed : May be harmful if swallowed or in contact with skin.  
Causes skin irritation.  
May cause an allergic skin reaction.  
Toxic if inhaled.
- Protection of first-aiders : First Aid responders should pay attention to self-protection and use the recommended protective clothing
- Notes to physician : Treat symptomatically and supportively.

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### 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray  
Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during fire-fighting : 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.  
Vapours may form explosive mixtures with air.  
The product will float on water and can be reignited on surface water.  
Cool closed containers exposed to fire with water spray.

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- Specific extinguishing methods : 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.  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- 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.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.  
Use personal protective equipment.
- 

### 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Ensure adequate ventilation.  
Remove all sources of ignition.  
Evacuate personnel to safe areas.  
Follow safe handling advice and personal protective equipment recommendations.  
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.  
Never return spills in original containers for re-use.  
Treat recovered material as described in the section "Disposal considerations".
- 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.
- Methods and materials for containment and 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.
- Prevention of secondary : Never return spills in original containers for re-use.
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hazards

Treat recovered material as described in the section "Disposal considerations".

### 7. HANDLING AND STORAGE

#### Handling

- Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
- 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 combustible material.
- Advice on safe handling : Do not swallow.  
Do not breathe vapours/dust.  
Avoid exposure - obtain special instructions before use.  
Avoid contact with skin and eyes.  
Avoid formation of aerosol.  
Take precautionary measures against static discharges.  
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.  
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.  
Protect from contamination.
- Avoidance of contact : Accelerators, strong acids and bases, heavy metals and heavy metal salts, reducing agents

#### Storage

- Conditions for safe storage : 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.  
Store in original container.  
Keep containers tightly closed in a cool, well-ventilated place.  
Store in accordance with the particular national regulations.
- Materials to avoid : Keep away from strong acids, bases, heavy metal salts and other reducing substances.

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Recommended storage temperature : 10 - 30 °C

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Acetylacetone	123-54-6	TWA	25 ppm	ACGIH

**Engineering measures** : Minimize workplace exposure concentrations.

#### Personal protective equipment

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

Filter type : ABEK-filter

Eye/face protection : Tightly fitting safety goggles  
Please wear suitable protective goggles. Also wear face protection if there is a splash hazard.  
Ensure that eyewash stations and safety showers are close to the workstation location.

Skin and body protection : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.

Hand protection  
Material : butyl-rubber  
Break through time : >= 480 min  
Glove thickness : 0.5 mm

Remarks : 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.

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.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

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Appearance	:	liquid
Colour	:	light yellow
Odour	:	ester-like
Odour Threshold	:	No data available
pH	:	No data available
Melting point/range	:	< 0 °C
Boiling point/boiling range	:	Decomposition: Decomposes below the boiling point.
Flash point	:	48 °C Method: ISO 3679
Flammability (solid, gas)	:	Not applicable
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapour pressure	:	No data available
Density	:	1.03 g/cm <sup>3</sup> (20 °C)
Solubility(ies) Water solubility	:	insoluble
Partition coefficient: n-octanol/water	:	No data available
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.
Viscosity Viscosity, dynamic	:	4 mPa.s (20 °C)
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing. Organic peroxide

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### 10. STABILITY AND REACTIVITY

Reactivity	:	Stable under recommended storage conditions.
Chemical stability	:	Stable under recommended storage conditions.



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- Possibility of hazardous reactions : Vapours may form explosive mixture with air.
- Conditions to avoid : Protect from contamination.  
Contact with incompatible substances can cause decomposition at or below SADT.  
Heat, flames and sparks.  
Avoid confinement.
- Incompatible materials : Accelerators, strong acids and bases, heavy metals and heavy metal salts, reducing agents
- Hazardous decomposition products : Irritant, caustic, flammable, noxious/toxic gases and vapours can develop in the case of fire and decomposition
- 

### 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

May be harmful if swallowed or in contact with skin.  
Toxic if inhaled.

#### Product:

- Acute oral toxicity : Acute toxicity estimate: 2,479 mg/kg  
Method: Calculation method
- Acute inhalation toxicity : Acute toxicity estimate: 0.82 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: Calculation method
- Acute dermal toxicity : Acute toxicity estimate: 3,435 mg/kg  
Method: Calculation method

#### Components:

##### **tert-Butyl perbenzoate:**

- Acute oral toxicity : LD0 (Rat): > 2,000 mg/kg  
Method: OECD Test Guideline 423  
Assessment: The substance or mixture has no acute oral toxicity
- Acute inhalation toxicity : LC50 (Rat): 1.01 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 436
- Acute dermal toxicity : LD0 (Rat): > 2,000 mg/kg  
Method: OECD Test Guideline 402  
Assessment: The substance or mixture has no acute dermal toxicity

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### **Acetylacetone:**

Acute oral toxicity : LD50 (Rat): 570 mg/kg

Acute inhalation toxicity : LC50 (Rat): 5.1 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour  
Method: OECD Test Guideline 403  
Assessment: The component/mixture is toxic after short term inhalation.

Acute dermal toxicity : LD50 (Rabbit, female): 790 mg/kg

### **Skin corrosion/irritation**

Causes skin irritation.

### **Product:**

Remarks: May cause skin irritation and/or dermatitis.

### **Components:**

#### **tert-Butyl perbenzoate:**

Species: Rabbit  
Method: OECD Test Guideline 404  
Result: Skin irritation

#### **Acetylacetone:**

Species: Rabbit  
Result: No skin irritation

### **Serious eye damage/eye irritation**

Not classified based on available information.

### **Product:**

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

### **Components:**

#### **tert-Butyl perbenzoate:**

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

#### **Acetylacetone:**

Species: Rabbit  
Result: No eye irritation

### **Respiratory or skin sensitisation**

#### **Skin sensitisation**

May cause an allergic skin reaction.

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### Respiratory sensitisation

Not classified based on available information.

### Product:

Remarks: Causes sensitisation.

### Components:

#### tert-Butyl perbenzoate:

Species: Mouse

Method: OECD Test Guideline 429

Result: Probability or evidence of high skin sensitisation rate in humans

Remarks: May cause sensitisation by skin contact.

#### Acetylacetone:

Exposure routes: Skin contact

Species: Mouse

Method: OECD Test Guideline 429

Result: Does not cause skin sensitisation.

### Germ cell mutagenicity

Not classified based on available information.

### Components:

#### tert-Butyl perbenzoate:

- Genotoxicity in vitro
- : Test Type: Bacterial reverse mutation assay (AMES)  
Method: OECD Test Guideline 471  
Result: positive
  - : Test Type: In vitro mammalian cell gene mutation test  
Method: OECD Test Guideline 476  
Result: positive
  - : Test Type: Chromosome aberration test in vitro  
Method: OECD Test Guideline 473  
Result: positive
  - : Test Type: Mouse Lymphoma  
Result: positive
- Genotoxicity in vivo
- : Test Type: Micronucleus test  
Species: Mouse (male and female)  
Application Route: Oral  
Result: negative

#### Acetylacetone:

- Genotoxicity in vitro
- : Method: OECD Test Guideline 471  
Result: negative
  - : Method: OECD Test Guideline 479  
Result: positive

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Genotoxicity in vivo

- : Method: OECD Test Guideline 473  
Result: positive
- : Method: OECD Test Guideline 476  
Result: negative
- : Method: OECD Test Guideline 474  
Result: positive
- Method: OECD Test Guideline 483  
Result: negative
- Method: OECD Test Guideline 475  
Result: negative
- Method: OECD Test Guideline 478  
Result: Equivocal
- Test Type: DNA Repair  
Species: Rat  
Application Route: Oral  
Result: negative
- Species: Rat  
Application Route: inhalation (vapour)  
Method: OPPTS 870.5395  
Result: negative

### **Carcinogenicity**

Not classified based on available information.

### **Components:**

#### **tert-Butyl perbenzoate:**

Remarks: This information is not available.

### **Reproductive toxicity**

Not classified based on available information.

### **Components:**

#### **tert-Butyl perbenzoate:**

Effects on fertility : Species: Rat  
Application Route: Oral  
General Toxicity - Parent: NOAEL: 300 mg/kg body weight  
Method: OECD Test Guideline 421

Effects on foetal development : Species: Rat  
Application Route: Oral  
General Toxicity Maternal: NOAEL: 300 mg/kg body weight  
Method: OECD Test Guideline 414

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### Acetylacetone:

Effects on foetal development

: Species: Rat  
Application Route: inhalation (vapour)  
Duration of Single Treatment: 13 d  
General Toxicity Maternal: NOAEC: 200  
Teratogenicity: NOAEC Parent: 400  
Embryo-foetal toxicity: NOAEC F1: 50  
Method: OECD Test Guideline 414

Species: Rat  
Application Route: inhalation (vapour)  
Duration of Single Treatment: 13 d  
General Toxicity Maternal: LOAEC: 400  
Embryo-foetal toxicity: LOAEC F1: 200  
Method: OECD Test Guideline 414

### STOT - single exposure

Not classified based on available information.

### STOT - repeated exposure

Not classified based on available information.

### Repeated dose toxicity

#### Components:

##### Acetylacetone:

Species: Rat  
NOAEL: 200 mg/kg  
LOAEL: 805 mg/kg  
Application Route: inhalation (vapour)  
Exposure time: 9 d

Species: Rat  
NOAEL: 100 mg/kg  
Application Route: inhalation (vapour)  
Exposure time: 90 d  
Method: OECD Test Guideline 413

Species: Rabbit  
NOAEL: 244 mg/kg  
LOAEL: 975 mg/kg  
Application Route: Dermal  
Exposure time: 9 d

### Aspiration toxicity

Not classified based on available information.

#### Components:

##### Acetylacetone:

No aspiration toxicity classification

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### Further information

#### Product:

Remarks: Solvents may degrease the skin.

#### Components:

##### **Acetylacetone:**

Remarks: Solvents may degrease the skin.

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## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Components:

##### **tert-Butyl perbenzoate:**

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 1.6 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 11 mg/l  
aquatic invertebrates : Exposure time: 48 h  
Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 0.8  
mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 0.72  
mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

M-Factor (Acute aquatic tox- : 1  
icity)

Toxicity to daphnia and other : EC10 (Daphnia magna (Water flea)): 0.49 mg/l  
aquatic invertebrates (Chron- : Exposure time: 21 d  
ic toxicity) : Method: OECD Test Guideline 211

Toxicity to microorganisms : EC50: 43 mg/l  
Exposure time: 0.5 h  
Method: OECD Test Guideline 209

##### **Acetylacetone:**

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 104 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 25.9 mg/l

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aquatic invertebrates		Exposure time: 48 h Method: OECD Test Guideline 202
		NOEC (Daphnia magna (Water flea)): 4.3 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 83.22 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
		NOEC (Pseudokirchneriella subcapitata (green algae)): 3.2 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to fish (Chronic toxicity)	:	NOEC (Pimephales promelas (fathead minnow)): 10 mg/l Exposure time: 34 d Method: OECD Test Guideline 210
		LOEC (Pimephales promelas (fathead minnow)): 22 mg/l Exposure time: 34 d Method: OECD Test Guideline 210
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 18 mg/l Exposure time: 21 d Method: OECD Test Guideline 211
Toxicity to microorganisms	:	EC50: 107.6 mg/l Exposure time: 3 h Method: OECD Test Guideline 209
		EC10: 13.2 mg/l Exposure time: 3 h Method: OECD Test Guideline 209

### Persistence and degradability

#### Components:

##### **tert-Butyl perbenzoate:**

Biodegradability	:	Result: Readily biodegradable. Method: OECD Test Guideline 301D
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##### **Acetylacetone:**

Biodegradability	:	Result: Readily biodegradable. Method: OECD Test Guideline 301C
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### Bioaccumulative potential

#### Components:

##### **tert-Butyl perbenzoate:**

Partition coefficient: n-octanol/water : log Pow: 2.89 (25 °C)

##### **Acetylacetone:**

Bioaccumulation : Bioconcentration factor (BCF): 3.16  
Remarks: Calculation

Partition coefficient: n-octanol/water : log Pow: 0.68 (40 °C)

### Mobility in soil

No data available

### 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.

#### Components:

##### **Acetylacetone:**

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

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## 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues : 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 wastes in an approved waste disposal facility.

Contaminated packaging : 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.  
Dispose of in accordance with local regulations.



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### 14. TRANSPORT INFORMATION

#### International Regulations

##### UNRTDG

UN number : UN 3103  
Proper shipping name : ORGANIC PEROXIDE TYPE C, LIQUID  
(tert-BUTYL PEROXYBENZOATE)  
Class : 5.2  
Packing group : Not assigned by regulation  
Labels : 5.2

##### IATA-DGR

UN/ID No. : UN 3103  
Proper shipping name : Organic peroxide type C, liquid  
(tert-Butyl peroxybenzoate)  
Class : 5.2  
Packing group : Not assigned by regulation  
Labels : Organic Peroxides, Keep Away From Heat  
Packing instruction (cargo aircraft) : 570  
Packing instruction (passenger aircraft) : 570

##### IMDG-Code

UN number : UN 3103  
Proper shipping name : ORGANIC PEROXIDE TYPE C, LIQUID  
(tert-BUTYL PEROXYBENZOATE)  
Class : 5.2  
Packing group : Not assigned by regulation  
Labels : 5.2  
EmS Code : F-J, S-R  
Marine pollutant : yes

#### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

#### National Regulations

##### GB 6944/12268

UN number : UN 3103  
Proper shipping name : ORGANIC PEROXIDE TYPE C, LIQUID  
(tert-BUTYL PEROXYBENZOATE)  
Class : 5.2  
Packing group : Not assigned by regulation  
Labels : 5.2

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



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### 15. REGULATORY INFORMATION

#### National regulatory information

**Gefahrengruppe nach § 3 BGV B4: Ib, S+ (German regulatory requirements)**

**Produkt unterliegt dem Sprengstoffgesetz (SprengG; Stoffgruppe C). (German regulatory requirements)**

**Law on the Prevention and Control of Occupational Diseases**

**Regulations on Safety Management of Hazardous Chemicals**

Catalogue of Hazardous Chemicals : Listed

Identification of Major Hazard Installations for Dangerous Chemicals (GB 18218)

Category	Threshold quantity
Organic peroxides	50 t

Identification of Major Hazard Installations for Dangerous Chemicals (GB 18218)

Category	Threshold quantity
Flammable liquids	5,000 t

Hazardous Chemicals for Priority Management under SAWS : Listed

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

DSL (CA) : All components of this product are on the Canadian DSL

AICS (AU) : On the inventory, or in compliance with the inventory

NZIoC (NZ) : On the inventory, or in compliance with the inventory

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

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

IECSC (CN) : On the inventory, or in compliance with the inventory

TCSI (TW) : On the inventory, or in compliance with the inventory

TSCA (US) : On TSCA Inventory

### 16. OTHER INFORMATION

#### Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -

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Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); 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; ERG - Emergency Response Guide; 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; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; 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; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Date format : yyyy/mm/dd

### Disclaimer

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

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