

## **NOROX PULCAT S**

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

#### **1.1 Product identifier**

Trade name : NOROX PULCAT S

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

Use of the Sub-  
stance/Mixture : Curing chemical

#### **1.3 Details of the supplier of the safety data sheet**

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

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

#### **1.4 Emergency telephone number**

+49 / 89 / 74422 – 0 (24 h)

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### **SECTION 2: Hazards identification**

#### **2.1 Classification of the substance or mixture**

##### **Classification (REGULATION (EC) No 1272/2008)**





Flammable liquids, Category 3	H226: Flammable liquid and vapour.
Organic peroxides, Type D	H242: Heating may cause a fire.
Acute toxicity, Category 4	H332: Harmful if inhaled.
Skin irritation, Category 2	H315: Causes skin irritation.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Aspiration hazard, Category 1	H304: May be fatal if swallowed and enters air-ways.
Chronic aquatic toxicity, Category 4	H413: May cause long lasting harmful effects to aquatic life.

#### **2.2 Label elements**

##### **Labelling (REGULATION (EC) No 1272/2008)**

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Hazard pictograms	:	   
Signal word	:	Danger
Hazard statements	:	H226      Flammable liquid and vapour. H242      Heating may cause a fire. H304      May be fatal if swallowed and enters air-ways.  H315      Causes skin irritation. H317      May cause an allergic skin reaction. H318      Causes serious eye damage. H332      Harmful if inhaled. H413      May cause long lasting harmful effects to aquatic life.
Precautionary statements	:	<b>Prevention:</b> P210      Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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. P235      Keep cool. P261      Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P262      Do not get in eyes, on skin, or on clothing. P273      Avoid release to the environment. P280      Wear protective gloves/ protective clothing/ eye protection/ face protection.  <b>Response:</b> P301 + P310      IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. P304 + P340 + P312      IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. P305 + P351 + P338      IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P315      Get immediate medical advice/ attention. P331      Do NOT induce vomiting. P333 + P313      If skin irritation or rash occurs: Get medical advice/ attention. P362 + P364      Take off contaminated clothing and wash it before reuse.  <b>Storage:</b> P403 + P235      Store in a well-ventilated place. Keep cool. <b>Disposal:</b> P501      Dispose of contents/ container to an ap-

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proved waste disposal plant.

Hazardous components which must be listed on the label:

2-Pentanone, 4-methyl-, peroxide (CAS-No. 37206-20-5)

Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated (CAS-No. 93685-81-5)

### 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.

Vapours may form explosive mixture with air.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Chemical nature : Organic Peroxide  
Liquid mixture

#### Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
2-Pentanone, 4-methyl-, peroxide	37206-20-5 253-396-4	Org. Perox. D; H242 Acute Tox. 4; H302 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317	>= 55 - < 65
Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated	93685-81-5 297-629-8 01-2119490725-29	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Aquatic Chronic 4; H413	>= 40 - < 45

For explanation of abbreviations see section 16.

## SECTION 4: First aid measures

### 4.1 Description of 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.

Protection of first-aiders : First Aid responders should pay attention to self-protection and use the recommended protective clothing

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

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- Keep respiratory tract clear.  
If breathed in, move person into fresh air.
- 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 : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.  
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
Continue rinsing eyes during transport to hospital.  
Remove contact lenses.  
Protect unharmed eye.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.  
Do NOT induce vomiting.  
Call a physician immediately.  
Contact a poison control center.  
Rinse mouth thoroughly with water.

### 4.2 Most important symptoms and effects, both acute and delayed

- Risks : May be fatal if swallowed and enters airways.  
Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye damage.  
Harmful if inhaled.

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

- Treatment : Treat symptomatically and supportively.
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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media : Water spray  
Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical
- Unsuitable extinguishing media : High volume water jet

### 5.2 Special hazards arising from the substance or mixture

- Specific hazards during fire-fighting : Contact with incompatible materials or exposure to temperatures exceeding SADT may result in a self-accelerating de-

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composition 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.  
Cool closed containers exposed to fire with water spray.

### 5.3 Advice for firefighters

- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.
- Specific extinguishing methods : Do not use a solid water stream as it may scatter and spread fire.  
Remove undamaged containers from fire area if it is safe to do so.  
Use water spray to cool unopened containers.
- Further information : 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.
- 

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

- Personal precautions : 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".

### 6.2 Environmental precautions

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

### 6.3 Methods and material for containment and cleaning up

- Methods for cleaning up : Contact with incompatible substances can cause decomposition at or below SADT.  
Clear spills immediately.  
Suppress (knock down) gases/vapours/mists with a water spray jet.

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To clean the floor and all objects contaminated by this material, use plenty of water.  
Soak up with inert absorbent material.  
Isolate waste and do not reuse.  
Non-sparking tools should be used.  
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.

### 6.4 Reference to other sections

For personal protection see section 8.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

- |   |   |
|---|---|
| Technical measures                              | : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.   |
| Advice on safe handling                         | : Do not swallow.<br>Do not breathe vapours/dust.<br>Avoid exposure - obtain special instructions before use.<br>Avoid contact with skin and eyes.<br>Avoid formation of aerosol.<br>Take precautionary measures against static discharges.<br>Never return any product to the container from which it was originally removed.<br>Provide sufficient air exchange and/or exhaust in work rooms.<br>Avoid confinement.<br>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.<br>Smoking, eating and drinking should be prohibited in the application area.<br>Wash thoroughly after handling.<br>For personal protection see section 8.<br>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.<br>Protect from contamination. |
| 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.  |
| Hygiene measures                                | : Keep away from food and drink. When using do not eat or drink. When using do not smoke. Wash hands before breaks and immediately after handling the product.  |

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

- |   |  |
|---|--|
| Requirements for storage areas and containers | : Avoid impurities (e.g. rust, dust, ash), risk of decomposition.<br>Electrical installations / working materials must comply with |
|---|--|
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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.

Advice on common storage : Keep away from strong acids, bases, heavy metal salts and other reducing substances.

Recommended storage temperature : < 25 °C

Other data : No decomposition if stored normally.

### 7.3 Specific end use(s)

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### Engineering measures

Minimize workplace exposure concentrations.

#### Personal protective equipment

Eye 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.

Hand protection  
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.

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

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

Filter type : ABEK-filter

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

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Appearance	: liquid
Colour	: colourless
Odour	: characteristic
pH	: No data available
Melting point/range	: < -25 °C
Boiling point/boiling range	: Decomposition: Decomposes below the boiling point.
Flash point	: 40 °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	: 0.89 g/cm <sup>3</sup> (20 °C)
Solubility(ies)	
Water solubility	: No data available
Solubility in other solvents	: Solvent: Alcohol Description: completely miscible
	Solvent: Phthalates Description: completely miscible
Partition coefficient: n-octanol/water	: No data available
Viscosity	
Viscosity, dynamic	: 5 mPa.s (20 °C)
Explosive properties	: Not explosive
Oxidizing properties	: The substance or mixture is not classified as oxidizing. Organic peroxide

### 9.2 Other information

Self-Accelerating decomposition temperature (SADT)	: 50 °C Method: UN-Test H.4 SADT-Self Accelerating Decomposition Temperature. Lowest
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temperature at which the tested package size will undergo a self-accelerating decomposition reaction.

Refractive index : 1.43 at 20 °C

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### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

Stable under recommended storage conditions.

#### 10.2 Chemical stability

Stable under recommended storage conditions.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions : Vapours may form explosive mixture with air.

#### 10.4 Conditions to avoid

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

#### 10.5 Incompatible materials

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

#### 10.6 Hazardous decomposition products

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

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### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

##### Acute toxicity

Harmful if inhaled.

##### Product:

Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg  
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: 2.5 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: Calculation method

##### Components:

##### **2-Pentanone, 4-methyl-, peroxide:**

Acute oral toxicity : LD50 (Rat): 1,770 mg/kg

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Acute inhalation toxicity : LC50 (Rat): 1.5 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Remarks: Harmful by inhalation.

Acute dermal toxicity : LD0 (Rat): > 2,000 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity

**Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated:**

Acute oral toxicity : LD50 (Rat): > 15,000 mg/kg  
Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rabbit): > 3,160 mg/kg  
Method: OECD Test Guideline 402

**Skin corrosion/irritation**

Causes skin irritation.

**Product:**

Remarks: Extremely corrosive and destructive to tissue.

**Components:**

**2-Pentanone, 4-methyl-, peroxide:**

Result: Skin irritation

**Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated:**

Species: Rabbit

Method: OECD Test Guideline 404

Result: No skin irritation

**Serious eye damage/eye irritation**

Causes serious eye damage.

**Product:**

Remarks: May cause irreversible eye damage.

**Components:**

**2-Pentanone, 4-methyl-, peroxide:**

Result: Risk of serious damage to eyes.

**Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated:**

Species: Rabbit

Method: OECD Test Guideline 405

Result: No eye irritation

**Respiratory or skin sensitisation**

Skin sensitisation: May cause an allergic skin reaction.

Respiratory sensitisation: Not classified based on available information.

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### **Product:**

Remarks: Causes sensitisation.

### **Components:**

#### **2-Pentanone, 4-methyl-, peroxide:**

Test Type: Maximisation Test (GPMT)

Exposure routes: Skin contact

Species: Guinea pig

Result: May cause sensitisation by skin contact.

#### **Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated:**

Exposure routes: Skin contact

Species: Guinea pig

Method: OECD Test Guideline 406

Result: Does not cause skin sensitisation.

### **Germ cell mutagenicity**

Not classified based on available information.

### **Components:**

#### **2-Pentanone, 4-methyl-, peroxide:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Method: OECD Test Guideline 471  
Result: negative

: Test Type: Chromosome aberration test in vitro  
Method: OECD Test Guideline 473  
Result: positive

Genotoxicity in vivo : Test Type: Micronucleus test  
Species: Mouse  
Method: OECD Test Guideline 474  
Result: negative

#### **Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated:**

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

: Method: OECD Test Guideline 476  
Result: negative

: Method: OECD Test Guideline 473  
Result: negative

Genotoxicity in vivo : Species: Rat  
Application Route: inhalation (dust/mist/fume)  
Method: OECD Test Guideline 478  
Result: negative

Species: Mouse  
Application Route: Oral  
Method: OECD Test Guideline 474

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Result: negative

### **Carcinogenicity**

Not classified based on available information.

#### **Components:**

**Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated:**

Species: Mouse

Application Route: inhalation (vapour)

Exposure time: 105 weeks

NOAEL: No observed adverse effect level: 2.2 mg/l

Method: OECD Test Guideline 453

### **Reproductive toxicity**

Not classified based on available information.

#### **Components:**

**Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated:**

Effects on fertility : Species: Rat  
Application Route: Oral  
General Toxicity - Parent: No observed adverse effect level:  
1,000 mg/kg body weight  
Method: OECD Test Guideline 422

Effects on foetal development : Test Type: Embryo-foetal development  
Species: Rat  
Application Route: inhalation (vapour)  
General Toxicity Maternal: No observed adverse effect level:  
900 µg/kg body weight  
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:**

**Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated:**

Species: Rat

NOAEL: > 5,000 mg/kg

Application Route: Ingestion

Exposure time: 90 d

Method: OECD Test Guideline 408

Species: Rat

NOAEL: >= 1.16 mg/l

Application Route: inhalation (dust/mist/fume)

Exposure time: 13 w

Method: OECD Test Guideline 413

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### Aspiration toxicity

May be fatal if swallowed and enters airways.

### Components:

**Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated:**

May be fatal if swallowed and enters airways.

### Further information

#### Product:

Remarks: Solvents may degrease the skin.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Components:

**Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated:**

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 0.04 mg/l  
Exposure time: 48 h  
Method: OECD Test Guideline 202

Toxicity to algae : IC50 (Desmodesmus subspicatus (green algae)): > 0.04 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

Ecotoxicology Assessment  
Acute aquatic toxicity : This product has no known ecotoxicological effects.

Chronic aquatic toxicity : May cause long lasting harmful effects to aquatic life.

### 12.2 Persistence and degradability

#### Components:

**2-Pentanone, 4-methyl-, peroxide:**

Biodegradability : Method: OECD Test Guideline 301D  
Remarks: Readily biodegradable

**Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated:**

Biodegradability : Result: Not readily biodegradable.

### 12.3 Bioaccumulative potential

#### Components:

**2-Pentanone, 4-methyl-, peroxide:**

Partition coefficient: n-octanol/water : Remarks: No data available

**Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated:**

Partition coefficient: n-octanol/water : log Pow: 6.96  
Remarks: Calculation

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### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

**Product:**

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

### 12.6 Other adverse effects

**Product:**

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

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## 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 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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## SECTION 14: Transport information

### 14.1 UN 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  
(METHYL ISOBUTYL KETONE PEROXIDE(S))  
ADR : ORGANIC PEROXIDE TYPE D, LIQUID  
(METHYL ISOBUTYL KETONE PEROXIDE(S))

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**RID** : ORGANIC PEROXIDE TYPE D, LIQUID  
(METHYL ISOBUTYL KETONE PEROXIDE(S))

**IMDG** : ORGANIC PEROXIDE TYPE D, LIQUID  
(METHYL ISOBUTYL KETONE PEROXIDE(S))

**IATA** : Organic peroxide type D, liquid  
(Methyl isobutyl ketone peroxide(s))

### 14.3 Transport hazard class(es)

**ADN** : 5.2

**ADR** : 5.2

**RID** : 5.2

**IMDG** : 5.2

**IATA** : 5.2

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

### 14.5 Environmental hazards

**ADN**  
Environmentally hazardous : no

**ADR**

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Environmentally hazardous : no

### RID

Environmentally hazardous : no

### IMDG

Marine pollutant : no

#### 14.6 Special precautions for user

Not applicable

#### 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

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

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 (EC) No 850/2004 on persistent organic pollutants : 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	Quantity 1 50 t	Quantity 2 200 t
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Water contaminating class (Germany) : WGK 1 slightly water endangering

Other regulations : Gefahrengruppe nach § 3 BGV B4: Ib (German regulatory requirements)

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

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

CH INV (CH) : On the inventory, or in compliance with the inventory



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TSCA (US)	: Not On TSCA Inventory Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated
DSL (CA)	: All components of this product are on the Canadian DSL
AICS (AU)	: Not in compliance with the inventory Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated
NZIoC (NZ)	: On the inventory, or in compliance with the inventory
ENCS (JP)	: Not in compliance with the inventory 2-Pentanone, 4-methyl-, peroxide Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated
ISHL (JP)	: Not in compliance with the inventory 2-Pentanone, 4-methyl-, peroxide Hydrocarbons, C4, 1,3-butadiene-free, polymerised., triisobutylene fraction, hydrogenated
KECI (KR)	: Not in compliance with the inventory 2-Pentanone, 4-methyl-, peroxide
PICCS (PH)	: On the inventory, or in compliance with the inventory
IECSC (CN)	: On the inventory, or in compliance with the inventory

### 15.2 Chemical Safety Assessment

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

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### SECTION 16: Other information

#### Full text of H-Statements

H226	: Flammable liquid and vapour.
H242	: Heating may cause a fire.
H302	: Harmful if swallowed.
H304	: May be fatal if swallowed and enters airways.
H315	: Causes skin irritation.
H317	: May cause an allergic skin reaction.
H318	: Causes serious eye damage.
H332	: Harmful if inhaled.
H413	: May cause long lasting harmful effects to aquatic life.

#### Full text of other abbreviations

Acute Tox.	: Acute toxicity
Aquatic Chronic	: Chronic aquatic toxicity
Asp. Tox.	: Aspiration hazard
Eye Dam.	: Serious eye damage

## **NOROX PULCAT S**

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Flam. Liq.	: Flammable liquids
Org. Perox.	: Organic peroxides
Skin Irrit.	: Skin irritation
Skin Sens.	: Skin sensitisation

(Q)SAR - (Quantitative) Structure Activity Relationship; 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; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; DIN - Standard of the German Institute for Standardisation; 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; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; 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; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; 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; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; 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; TRGS - Technical Rule for Hazardous Substances; UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative; DSL - Domestic Substances List (Canada); KECI - Korea Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); AICS - Australian Inventory of Chemical Substances; IECSC - Inventory of Existing Chemical Substances in China; ENCS - Existing and New Chemical Substances (Japan); ISHL - Industrial Safety and Health Law (Japan); PICCS - Philippines Inventory of Chemicals and Chemical Substances; NZIoC - New Zealand Inventory of Chemicals; TCSI - Taiwan Chemical Substance Inventory; CMR - Carcinogen, Mutagen or Reproductive Toxicant; GLP - Good Laboratory Practice

### **Further 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.

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