

# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE PREPARATION AND COMPANY

**Product Name and/or Code:** **NOROX AZOX**

**Intended use:** Initiator for unsaturated polyester resin.

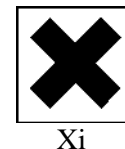
**Name and address of the company:** Syrgis Performance Initiators AB  
Box 26083  
SE-100 41 Stockholm  
Sweden

**Telephone:** +46 8 545 121 60

In case of an emergency: contact tel. +46 8 33 70 43 or National Poison Centre.

## 2. HAZARDS IDENTIFICATION OF THE PREPARATION

**Danger classification:** O = Oxidising  
Xi = Irritating



May cause fire. Irritating to eyes and skin.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

| Components               | EINECS-no | CAS-no     | Conc. % | Symbol/R-phrases |
|--------------------------|-----------|------------|---------|------------------|
| Acetyl acetone peroxide  | 253-384-9 | 37187-22-7 | 30-40   | Xi / 5- 7-36/38  |
| Proprietary phlegmatiser | 212-828-1 | 872-50-4   | 55-60   | Xi / 36/38       |

Balance: non hazardous ingredients. For the full R-phrases see section 16.

## 4. FIRST AID MEASURES

### General:

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

### Inhalation:

Remove to fresh air, keep patient warm and at rest, if breathing is irregular or stopped, administer artificial respiration. Give nothing by mouth. If unconscious, place in recovery position and seek medical advice.

**Skin contact:**

Remove contaminated clothing. Wash skin thoroughly with soap and water.

**Eye contact:**

Irrigate copiously with clean, fresh water for at least 15 minutes, alternate 2% NaCO<sub>3</sub>, holding the eyelids apart and seek medical advice if necessary.

**Ingestion:**

If accidentally swallowed obtain immediate medical attention. Keep at rest. Drink water or milk, and **DO NOT** induce vomiting.

## 5. FIRE-FIGHTING MEASURES

This peroxide is hard to ignite but will burn vigorously with acceleration. Use Water from a safe distance – preferably with a water-fog nozzle. For very small fires, an extinguisher with carbon dioxide, foam or dry chemical may be effective. In case of a fire in or near a storage area, cool stored containers with water spray.

**Recommendations:**

Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Appropriate breathing apparatus may be required. Cool closed containers exposed to fire with water. Do not allow run-off from fire fighting to enter drains or watercourses.

Decomposition products see section 10.

## 6. ACCIDENTAL RELEASE MEASURES

Avoid sources of ignition and ventilate the area. Avoid breathing vapours. Absorb the leak with an inert, non-combustible absorbent material, e.g. sand, earth, perlite or vermiculite. Transfer the material into a clean approved container for proper disposal. Wet the material with water. Wash the contaminated zone. Dike to prevent runoff from entering drains, sewers, streams etc. Avoid skin and eye contact. Wear personal protection equipment recommended in section 8.

If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

## 7. HANDLING AND STORAGE

**Handling:**

Provide adequate ventilation. Keep containers tightly closed when not in use. Do not use near food or drink. Avoid skin and eye contact. Avoid breathing vapours. Wear personal protection equipment recommended in section 8. Isolate from sources of heat, sparks and open flame. No sparking tools should be used. Preparation may charge electrostatically: always use earthing leads when transferring from one container to another. Dilution is not recommended. Never dilute with acetone.

**Storage:**

Store in accordance with local regulations. Store in original package, in cool, well ventilated place away from sources of heat, fires, sparks and direct sunlight. For maximum shelf life we recommend to store the product at temperatures not higher than 25°C. At higher temperatures the shelf life will be reduced. For safety reasons the storage temperature should not exceed 35°C. The product should not be stored below 0°C.

The product must never be stored together with accelerators such as dryers, heavy metal compounds etc. Avoid contact with rust. Keep away from sources of ignition. Keep away from oxidising agents, from strongly alkaline and strongly acid materials. Rotate stock using the oldest material first. Prevent unauthorised access.

## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

### Engineering Measures.

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Use clean equipment and tools of inert material such as stainless steel, polyethylene, polypropylene and glass. All equipment should be earthed. Use Peleus ball when pipetting the peroxide solutions.

### Exposure Limits:

There are no exposure limits on the product itself or on the components.

### Personal Protection.

#### Respiratory protection:

Is required if the limits like TLV are exceeded. Gas mask with filter A (brown, organic substances) may be necessary.

#### Hand protection:

Use resistant gloves of: butylrubber, ethylen-vinylalcohol, teflon.

Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.

#### Eye protection:

Use safety eyewear designed to protect against splash of liquids. Splashes in the eyes may cause serious eye damage.

#### Skin protection:

Personnel should wear antistatic clothing made of natural fibre or of high temperature resistant synthetic fibre. All parts of the body should be washed after contact.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|   |                              |
|---|------------------------------|
| <b>Physical state</b>                     | Liquid                       |
| <b>Flash point (°C)</b>                   | > 65      Method: Seta Flash |
| <b>Viscosity at 20°C (mPas)</b>           | 14 - 18                      |
| <b>Active oxygen (%)</b>                  | 4.4 - 4.6                    |
| <b>SADT (°C)</b>                          | 60                           |
| <b>Density at 20°C (g/cm<sup>3</sup>)</b> | 1.09 - 1.11                  |
| <b>Colour</b>                             | Clear, colourless            |
| <b>Solubility in water</b>                | Soluble                      |

## 10. STABILITY AND REACTIVITY

### Stability:

Stable when kept in original, closed container, out of direct sunlight at temperatures below 35°C.  
Decomposition of product due to heat or contamination may lead to fire or strong explosions.

### Materials and conditions to avoid:

Violent reactions can occur if the product comes in contact with cobalt accelerators or other peroxide accelerators /promoters, rust, heavy metal compounds, brass, galvanized steel, acetone, reducing or oxidizing agents and strong acids or bases. Therefore these materials must be avoided. Grinding dust and dirt must be avoided as well. Avoid higher temperatures and direct sunlight. Confinement in stainless steel equipments (tanks, vessels, pipes etc) must also be avoided.

### Major decomposition products:

Carbon dioxide, acetylacetone, nitrogen oxides, carbon monoxide, water

### Hazardous polymerization:

Will not occur.

## 11. TOXICOLOGICAL INFORMATION

### General

There is no toxicological data available on the product itself. This product contains phlegmatisizer which reduces the products health hazard compared to pure peroxid.

### Irritation data (Acetylacetone peroxide 33%):

|      |                       |
|------|-----------------------|
| Skin | Non-irritating        |
| Eye  | Moderately irritating |

### Toxicity data(Acetylacetone peroxide 33%):

|            |       |             |
|------------|-------|-------------|
| Oral (rat) | LD-50 | >2000 mg/kg |
|------------|-------|-------------|

### Inhalation

Peroxides may cause irritation to the respiratory system.Exposure to vapours may result in adverse health effects such as irritation of the mucous membrane and the respiratory system and adverse effect of the renal and central nervous system.Symptoms and signs include headache; dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

### Skin contact

Repeated or prolonged contact with the product may lead to removal of natural fats from the skin resulting in non-allergic contact dermatitis and absorption through the skin. Ketone peroxides og benzoyl peroxides may cause allergic eczema.

### Eye contact

Splashes in the eyes may cause serious damage to eyes.

## 12. ECOLOGICAL INFORMATION

There are no data available on the preparation itself.  
The product should not be allowed to enter drains of watercourses.

### 13. DISPOSAL CONSIDERATIONS

Do not allow into drains or watercourses. Water and emptied containers should be handled according to local regulations.

The producer recommends destruction of both peroxide rests and empty packaging by combustion under controlled forms.

### 14. TRANSPORT INFORMATION

|  |                               |
|--|-------------------------------|
| <b>Proper Shipping Name:</b> Organic peroxide type D, liquid (acetyl acetone peroxide) |                               |
| UN 3105  | <b>Class:</b><br>5.2          |
|  | <b>Label:</b><br>5.2          |
|  | <b>Packaging group:</b><br>II |
| <b>Marine pollutant:</b> No  | <b>EmS No:</b><br>F-J, S-R    |

### 15. REGULATORY INFORMATION



**Danger classification:** O = Oxidising  
Xi = Irritating

**Contains:** Acetyl acetone peroxide

**R phrases:**

**R-7** May cause fire.

**R-36/38** Irritating to eyes and skin.

**S phrases:**

**S-3/7** Keep container tightly closed in a cool place.

**S-36/37/39** Wear suitable protective clothing, gloves and eye/face protection.

**S-50** Do not mix with accelerators, reducing agents, strong acids, alkalis and heavy metal compounds.

## 16. OTHER INFORMATION

In addition from section 2:

Acetyl acetone peroxide. Symbol O, Xi  
R-5 Heating may cause an explosion.  
R-7 May cause fire.  
R-36/38 Irritating to eyes and skin.

This product is produced in Sweden.