



# MATERIAL SAFETY DATA SHEET

Syrgis Performance  
Initiators, Inc.  
Helena, AR

## NOROX<sup>®</sup> 600

### SECTION 1 - IDENTIFICATION OF THE PRODUCT AND THE COMPANY

PRODUCT NAME	NOROX <sup>®</sup> 600	TELEPHONE	870-572-2935
MANUFACTURER	Syrgis Performance Initiators, Inc.	CHEMTREC (24hr) (USA)	800-424-9300
ADDRESS	334 Phillips 311 Rd., Helena, AR 72342	(Maritime/International)	703-527-3887
CHEMICAL FAMILY	Organic Peroxide - Peroxydicarbonate	CAS NO.	15520-11-3
CHEMICAL NAME	Di-(4-tert-butylcyclohexyl) peroxydicarbonate	CHEMICAL FORMULA	C <sub>22</sub> H <sub>38</sub> O <sub>6</sub>

### SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS	CAS NO.	%
Di-(4-tert-butylcyclohexyl) peroxydicarbonate	15520-11-3	95 - 99

### SECTION 3 - HAZARD IDENTIFICATION OF THE PREPARATION

PHYSICAL HAZARDS	Organic Peroxide - Decomposition. Potential fire hazard.
HEALTH HAZARDS	Irritant.
EXPOSURE LIMITS	No data.
ROUTES OF EXPOSURE	
Skin Contact	May produce moderate skin irritation including redness, swelling and burning sensation.
Eye Contact	May produce moderate to severe eye and mucous membrane irritation..
Ingestion	Relatively non-toxic by ingestion
Inhalation	May be moderately irritating to the nose, throat and mucous membranes
EFFECTS OF OVER-EXPOSURE	None established.

### SECTION 4 - FIRST-AID MEASURES

SKIN	Immediately remove any contaminated clothing. Wash contaminated area thoroughly with soap and copious amounts of water for at least 15 minutes. If irritation or adverse symptoms develop, seek medical attention.
EYES	Remove any contact lenses at once. Flush eyes with water for at least 15 minutes. Ensure adequate flushing by separating the eyelids with fingers. If irritation or adverse symptoms develop, seek medical attention.
INGESTION	<b>DO NOT INDUCE VOMITING.</b> Drink plenty of water. Immediately contact a physician, hospital or Poison Control Center at once.
INHALATION	Remove to fresh air, if coughing, breathing becomes labored, irritation develops or other symptoms develop, seek medical attention at once, even if symptoms develop several hours after the exposure.

### SECTION 5 - FIRE-FIGHTING MEASURES

FLASH POINT	Decomposes.
FLAMMABLE LIMITS	Not applicable.
AUTOIGNITION POINT	Decomposes.
EXTINGUISHING MEDIA	Water from a safe distance - preferably with a fog nozzle. In case of very small fires, other means such as carbon dioxide, foam or dry chemical extinguishers may be effective.
SPECIAL FIRE FIGHTING PROCEDURES	Firemen should be equipped with protective clothing and SCBA's. In case of fire near storage area, cool the containers with water spray.
UNUSUAL FIRE AND EXPLOSION HAZARDS	The heat of decomposition of the peroxides adds to the heat of the fire. In case of decomposition without flames, explosion risk exists due to the developing air/gas mixture.

**NOROX<sup>®</sup> 600****SECTION 6 - ACCIDENTAL RELEASE MEASURES**

<b>STEPS TO BE TAKEN IN EVENT OF SPILL OR RELEASE</b>	Evacuate area of all unnecessary personnel. Refer to protective measures listed in sections 7 and 8. Soak spilled material with water. The addition of water will reduce the concentration of the peroxide and reduce its hazard potential. Keep spilled material from entering drains, sewers, streams, etc. Carefully collect the material and transfer into a clean polyethylene lined or a polyethylene drum disposal container. Label container and store in a secure area for proper disposal. Observe recommended storage temperature for this material.
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**SECTION 7 - HANDLING AND STORAGE**

<b>HANDLING</b>	Rotate stock using the oldest material first. Avoid contact with skin, eyes and clothing. Use PPE as specified in Section 8. Keep containers closed to prevent contamination. Keep away from sources of heat, sparks or flame. Do not add to hot solvents or monomers as a violent decomposition and/or reaction may result. Keep unused portions in original container. Do not transfer to rigid containers with tight closures. <u>DO NOT USE NEAR FOOD OR DRINK.</u> Wash thoroughly after handling.
<b>STORAGE</b>	Keep material in its original container away from any incompatible materials (see Section 10), direct sunlight or other sources of heat. Store in an isolated, well-ventilated area below 68°F (20°C). Keep below 86°F (30°C) at all times. Temperatures above 95°F (35°C) may lead to vigorous decomposition and fire. <u>DO NOT STORE WITH FOOD OR DRINK.</u> Refer to NFPA 432 Code for the Storage of Organic Peroxide Formulations from the National Fire Protection Association for additional storage information.
<b>OTHER PRECAUTIONS</b>	Unmixed, uncontaminated material, remaining at the end of the day, shall be returned to a proper organic peroxide storage area. Under no circumstances should material be returned to the original container.

**SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION**

<b>VENTILATION</b>	Use adequate ventilation.
<b>RESPIRATORY PROTECTION</b>	Not generally required unless necessary to prevent respiratory irritation. In case of spill or leak of unknown concentration, use NIOSH approved supplied air respirator.
<b>EYE PROTECTION</b>	Safety goggles recommended, goggles with a face shield are preferred.
<b>HAND PROTECTION</b>	Protective gloves recommended, butyl rubber (solvent resistant).
<b>OTHER</b>	A safety shower and eyewash is highly recommended when the risk of a significant exposure exists.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

<b>APPEARANCE AND ODOR:</b>	White solid with mild odor.	<b>SPECIFIC GRAVITY:</b>	Not established.
<b>BOILING POINT:</b>	Decomposes.	<b>FLASH POINT:</b>	Decomposes.
<b>VAPOR PRESSURE:</b>	N/A	<b>FLAMMABLE LIMITS:</b>	Not applicable.
<b>VAPOR DENSITY:</b>	N/A	<b>SADT</b>	40°C (104°F)
<b>EVAPORATION RATE:</b>	N/A	<b>pH:</b>	Not applicable.
<b>% VOLATILE BY VOLUME:</b>	N/A		
<b>SOLUBILITY IN WATER:</b>	Insoluble.		

**SECTION 10 - STABILITY AND REACTIVITY**

<b>STABILITY</b>	Unstable.
<b>CONDITIONS TO AVOID</b>	Contamination. Direct sunlight. Open flames. Sparks. Prolonged storage above 68°F (20°C). Storage at or above SADT. Storage near flammable or combustible materials.
<b>MATERIALS TO AVOID</b>	Promoters, accelerators, metals, acids, corrosives, oxidizing and reducing agents, or any hot material.
<b>HAZARDOUS DECOMPOSITION PRODUCTS</b>	Decomposition produces flammable gasses.
<b>HAZARDOUS POLYMERIZATION</b>	Will not occur.

**NOROX<sup>®</sup> 600****SECTION 11 - TOXICOLOGICAL INFORMATION**

Di-(4-tert-butylcyclohexyl) peroxydicarbonate

**Hazard Data:****Eye:** Rabbit : Slight irritant**Oral:** Rat--LD<sub>50</sub>: > 5000 mg/kg.**Skin:** Rabbit: Non irritating (24-hr. exp.)**SECTION 12 - ECOLOGICAL INFORMATION**

No data is available on the preparation itself. The product should be prevented from entering drains, sewers, streams, etc.

**SECTION 13 - DISPOSAL CONSIDERATIONS**

Prevent material from entering drains, sewers, streams, etc.

Immediately dispose of waste material at a RCRA approved hazardous waste management facility in accordance with federal, state and local regulations.

RCRA Classification of unadulterated product as a waste:

Reactive (D003)

Ignitable (D001)

**SECTION 14 - TRANSPORT INFORMATION**

<b>DOT Shipping Name:</b>	ORGANIC PEROXIDE TYPE C, SOLID, TEMPERATURE CONTROLLED, (DI-(4-TERT-BUTYLCYCLOHEXYL) PEROXYDICARBONATE, ≤100%)
<b>DOT Hazard Class:</b>	5.2
<b>UN/NA ID No.:</b>	UN3114
<b>DOT Packing Group:</b>	PG II
<b>Control Temperature:</b>	+30°C (86°F)
<b>Emergency Temperature:</b>	+35°C (95°F)
<b>Labels:</b>	5.2 (Organic Peroxide)
<b>2004 ERG GUIDE NO.:</b>	148

**SECTION 15 - REGULATORY INFORMATION**

The following chemicals are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Percent</u>
None	N/A	N/A

**Australian Inventory of Chemical Substances (AICS)**

The ingredients in this product are listed in the Australian AICS Inventory.

**Canadian Domestic Substances List (DSL)**

The ingredients in this product are listed in the Canadian DSL Inventory.

**Chinese Inventory of Existing Chemical Substances Manufactured or Imported in China (IECSC)**

The ingredients in this product are listed in the Chinese IECSC Inventory.

**European Inventory of Existing Commercial Chemical Substances (EINECS)**

The ingredients in this product are listed in the European EINECS Inventory.

**Japanese Existing and New Chemical Substances (ENCS)**

The ingredients in this product are listed in the Japanese ENCS Inventory.

**Korean Existing Chemicals List (ECL)**

The ingredients in this product are listed in the Korean ECL Inventory.

**US Toxic Substances Control Act (TSCA)**

The ingredients in this product are listed in the US TSCA Inventory.

**Status of Carcinogenicity**

Not recognized as a carcinogen by the IARC, NTP or OSHA.

**NOROX<sup>®</sup> 600****SECTION 16 - OTHER INFORMATION****NFPA 432 Organic Peroxide Classification**

Class III

**NFPA 704 Rating**Health

1

Flammability

3

Reactivity

2

**HMIS Rating**Health

1

Flammability

2

Reactivity

2

**MSDS Reference:** Norox 600 MSDS 0709**DISCLAIMER OF LIABILITY**

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