



# MATERIAL SAFETY DATA SHEET

Syrgis Performance  
Initiators, Inc.  
Helena, AR

## NOROX<sup>®</sup> 605

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

PRODUCT NAME	NOROX <sup>®</sup> 605	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.	53220-22-7
CHEMICAL NAME	Dimyristyl Peroxydicarbonate	CHEMICAL FORMULA	C <sub>30</sub> H <sub>58</sub> O <sub>6</sub>

### SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

<u>COMPONENTS</u>	<u>CAS NO.</u>	<u>%</u>
Dimyristyl Peroxydicarbonate	53220-22-7	technically pure

### SECTION 3 - HAZARD IDENTIFICATION OF THE PREPARATION

PHYSICAL HAZARDS	Organic Peroxide - Decomposition. Potential fire hazard.
HEALTH HAZARDS	Irritant.
ROUTES OF EXPOSURE	
Skin Contact	May produce moderate skin irritation including redness, swelling and burning sensation.
Eye Contact	May produce moderate eye and mucous membrane irritation.
Ingestion	Low to moderate toxicity 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</b> induce vomiting. Drink plenty of water. Call a physician or local Poison Control Center. Follow the physician's or the Poison Control Center's instructions.
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. Do not use water jet. 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. Decomposition/combustion may produce irritating, corrosive, and toxic gases and vapors.

**NOROX<sup>®</sup> 605****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 in original container. <b>DO NOT USE NEAR FOOD OR DRINK.</b> Wash thoroughly after handling.
<b>STORAGE</b>	Refrigeration is required, cool storage at 59°F (15°C) or below is recommended for longer shelf life and stability. Prolonged storage at elevated temperatures of 68°F (20°C) and higher will cause product degradation, gassing and potential container rupture which can result in a fire and/or explosion. Store out of direct sunlight in a well ventilated area away from combustible and incompatible materials. <b>DO NOT STORE WITH FOOD OR DRINK.</b> 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>	If airborne concentrations are expected to exceed acceptable levels wear a NIOSH/MSHA approved air-purifying respirator with an organic vapor cartridge or canister. When using respirators refer to OSHA's 29CFR 1910.134.
<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 greasy flakes with little to no odor.		
<b>BOILING POINT:</b>	Decomposes	<b>SPECIFIC GRAVITY:</b>	.5 at 20°C (68°F)
<b>VAPOR PRESSURE:</b>	Not applicable.	<b>FLASH POINT:</b>	Decomposes
<b>VAPOR DENSITY:</b>	Not applicable.	<b>FLAMMABLE LIMITS:</b>	Not applicable.
<b>EVAPORATION RATE:</b>	Not applicable.	<b>pH:</b>	Not applicable.
<b>% VOLATILE BY VOLUME:</b>	Not applicable.	<b>SADT:</b>	~ 40°C (104°F)
<b>SOLUBILITY IN WATER:</b>	Insoluble		

**SECTION 10 - STABILITY AND REACTIVITY**

<b>STABILITY</b>	Unstable.
<b>CONDITIONS TO AVOID</b>	Storage in direct sunlight, heat, flames, sparks. Storage at or above SADT (~40°C). Prevent product contamination.
<b>MATERIALS TO AVOID</b>	Promoters, accelerators, heavy metal salts, strong acids, bases, oxidizing and reducing agents, or any hot material. Contaminants (e.g. rust, dust, ash). Combustible materials.
<b>HAZARDOUS DECOMPOSITION PRODUCTS</b>	Decomposition produces flammable/explosive, irritant, corrosive, harmful/toxic gases and vapors.
<b>HAZARDOUS POLYMERIZATION</b>	Will not occur.

**NOROX<sup>®</sup> 605****SECTION 11 - TOXICOLOGICAL INFORMATION****Dimyristyl Peroxydicarbonate****Hazard Data:****Eye:** Rabbit : Slightly irritating**Oral:** Rat--LD<sub>50</sub>: > 2000 mg/kg.**Skin:** Rabbit: Non irritating (24-hr. exp.)**SECTION 12 - ECOLOGICAL INFORMATION****Dimyristyl Peroxydicarbonate****Activated sludge respiration inhibition test**

NOEC &gt;1000 mg/l

**Acute Aquatic Effects Data**Fathead minnow--LC<sub>50</sub>: >1000 mg/l/96h**Degradation** (closed bottle test)

Readily biodegradable

**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.

**SECTION 14 - TRANSPORT INFORMATION**

<b>DOT Shipping Name:</b>	ORGANIC PEROXIDE TYPE D, SOLID, TEMPERATURE CONTROLLED, (DIMYRISTYL PEROXYDICARBONATE, ≤100%)
<b>DOT Hazard Class:</b>	5.2
<b>UN/NA ID No.:</b>	UN3116
<b>DOT Packing Group:</b>	PG II
<b>Control Temperature:</b>	+20°C
<b>Emergency Temperature:</b>	+25°C
<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		

**Canadian Domestic Substances List (DSL)**

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

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

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

**TSCA Status**

This product is listed in the US Toxic Substances Control Act (TSCA) Inventory of Chemicals.

**Status of Carcinogenicity**

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

**NOROX<sup>®</sup> 605****SECTION 16 - OTHER INFORMATION****VOC Information**

Does not meet the definition of a VOC.

**NFPA 432 Organic Peroxide Classification**

Class III

**NFPA 704 Rating**

<u>Health</u>	<u>Flammability</u>	<u>Reactivity</u>
1	3	2

**HMIS Rating**

<u>Health</u>	<u>Flammability</u>	<u>Reactivity</u>
1	2	2

**MSDS Reference:** Norox 605 MSDS 0709

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