MATERIAL SAFETY DATA SHEET

NOROX® 305

Syrgis Performance Initiators, Inc.
Helena, AR

SECTION 1 - IDENTIFICATION OF THE PRODUCT AND THE COMPANY

PRODUCT NAME	**NOROX® 305**	**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 NAME	Dilauroyl Peroxide	**CAS NO.**	16111-62-9
CHEMICAL FAMILY	Organic Peroxide - Diacyl Peroxide	**CHEMICAL FORMULA**	$C_{20}H_{34}O_6$

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS	CAS NO.	%
Dilauroyl Peroxide	105-74-8	100

SECTION 3 - HAZARD IDENTIFICATION OF THE PREPARATION

PHYSICAL HAZARDS Organic Peroxide - Decomposition. Potential fire hazard. Potential dust/air mixture explosions.

HEALTH HAZARDS Potential irritant.

ROUTES OF EXPOSURE

Skin Contact May cause skin irritation.

Eye Contact May cause eye irritation, including redness of mucous membranes and tearing.

Ingestion May irritation of mucous membranes lining mouth, throat and stomach.

Inhalation Breathing dilauroyl peroxide dust may irritate the nose and throat. May cause coughing and chest discomfort.

EFFECTS OF OVER-EXPOSURE None known.

SECTION 4 - FIRST-AID MEASURES

SKIN Immediately remove any contaminated clothing. Wash contaminated area thoroughly with soap and copious amounts of water. 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 **Do Not** induce vomiting (danger of aspiration of chemicals into the lungs). Drink plenty of water if victim is completely conscious. Immediately call a physician. For aid to physician, suggest local Poison Control Center.

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 Not applicable.

FLAMMABLE LIMITS Not established.

AUTOIGNITION POINT Not established.

EXTINGUISHING MEDIA Water from a safe distance - preferably with a fog nozzle. In case of very small fires, other means such as carbon dioxide, alcohol resistant 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. Concentrated dust/air mixtures may present an explosion hazard.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN EVENT OF SPILL OR RELEASE	Evacuate area of all unnecessary personnel. Remove potential sources of ignition. Refer to protective measures listed in sections 7 and 8. Contain on and collect spilled material with vermiculite, diatomaceous earth or clean sand. Moisten with water. 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.

SECTION 7 - HANDLING AND STORAGE

HANDLING	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 materials as a violent decomposition and/or reaction may result. Keep unused portions in original container. Do not transfer to rigid containers with tight closures. DO NOT USE NEAR FOOD OR DRINK. Wash thoroughly after handling.
STORAGE	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 86°F (30°C). Product should be kept below 100°F (38°C) at all times. Temperatures above 122°F (50°C) will lead to vigorous decomposition and fire. DO NOT STORE WITH FOOD OR DRINK. Refer to NFPA 432 Code for the Storage of Organic Peroxide Formulations from the National Fire Protection Association for additional storage information.
OTHER PRECAUTIONS	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

VENTILATION	Use adequate ventilation.
RESPIRATORY PROTECTION	Not generally required unless necessary to prevent respiratory irritation. In case of spill or leak of unknown concentration, use NIOSH approved particle filtering respirator.
EYE PROTECTION	Safety goggles recommended, goggles with a face shield are preferred.
HAND PROTECTION	Protective gloves recommended, solvent resistant, such as butyl rubber, nitrile, neoprene or viton.
OTHER	A safety shower and eyewash is highly recommended when the risk of a significant exposure exits.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR:	White solid with a mild odor.		
BOILING POINT:	Decomposes	**SPECIFIC GRAVITY:**	.4 @ 20°C
VAPOR PRESSURE:	Not applicable.	**FLASH POINT:**	Not applicable.
VAPOR DENSITY:	Not applicable.	**FLAMMABLE LIMITS:**	Not established.
EVAPORATION RATE:	Not applicable.	**SADT**	50°C (122°F)
% VOLATILE BY VOLUME:	Not applicable.	**pH:**	Not applicable.
SOLUBILITY IN WATER:	Insoluble.		

SECTION 10 - STABILITY AND REACTIVITY

STABILITY	Stable under recommended storage conditions.
CONDITIONS TO AVOID	Contamination. Direct sunlight. Open flames. Heat. Sparks. Prolonged storage above 100°F (38°C). Storage at or above SADT. Storage near flammable or combustible materials.
MATERIALS TO AVOID	Promoters, accelerators, heavy metal salts, strong acids and bases, oxidizing and reducing agents, combustibles or any hot material.
HAZARDOUS DECOMPOSITION PRODUCTS	Decomposition produces various carbon oxides, hydrocarbons, flammable, irritant, corrosive, harmful/toxic gases and vapors.
HAZARDOUS POLYMERIZATION	Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Dilauroyl Peroxide (99.7%)

Hazard Data:

Inhalation: Rat--LC_{50}: 100 mg/l/4hr

Oral: Rat--LD_{50}: >2,000 mg/kg

Mutagenicity

AMES - Test: Not mutagenic.

SECTION 12 - ECOLOGICAL INFORMATION

The product should be prevented from entering drains, sewers, streams, etc.

Dilauroyl Peroxide (99.7%)

Ecological Data:

Ecotoxicity: Fish--LC_{50}: >1,000 mg/l/96hr; Bacterial--EC_{50}: >1,000 mg/l.

Biodegradability: 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

DOT Shipping Name:	ORGANIC PEROXIDE TYPE D, SOLID (DILAUROYL PEROXIDE, ≤100%)
DOT Hazard Class:	5.2
UN/NA ID No.:	UN3106
DOT Packing Group:	PG II
Labels:	5.2 (Organic Peroxide)
2004 ERG GUIDE NO.:	145

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.

Chemical Name	CAS Number	Percent
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 Exiting 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 Carcinogicity

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

SECTION 16 - OTHER INFORMATION

NFPA 432 Organic Peroxide Classification
Class IV

NFPA 704 Rating

Health	Flammability	Reactivity
1	2	2

HMIS Rating

Health	Flammability	Reactivity
1	2	2

MSDS Reference: Norox 305 MSDS 0709