



MATERIAL SAFETY DATA SHEET

NOROX[®] 300-70

Syrgis Performance
Initiators, Inc.
Helena, AR

SECTION 1 - IDENTIFICATION OF THE PRODUCT AND THE COMPANY

PRODUCT NAME	NOROX[®] 300-70	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	Isopropylcumyl hydroperoxide	CAS NO.	See Section 2
SYNONYMS	Diisopropylbenzene hydroperoxide	CHEMICAL FORMULA	C ₁₂ H ₁₈ O ₂
CHEMICAL FAMILY	Organic Peroxide		

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS	CAS NO.	%
Isopropylcumyl hydroperoxide	26762-93-6	68 - 72
Diisopropylbenzene (mixture of all isomers)	25321-09-9	28 - 32

SECTION 3 - HAZARD IDENTIFICATION OF THE PREPARATION

PHYSICAL HAZARDS	Organic Peroxide. Decomposition
HEALTH HAZARDS	Severe Irritant
EXPOSURE LIMITS	Both ACGIH and OSHA PEL have not been established for this chemical.
ROUTES OF EXPOSURE	
Skin Contact	May cause severe skin irritation, including redness and swelling, drying, scaling, thickening, depigmentation, and hair loss.
Eye Contact	May cause severe eye irritation, including redness and swelling.
Ingestion	May cause severe irritation.
Inhalation	May cause severe irritation, especially to mucus membranes.
EFFECTS OF OVER-EXPOSURE	No known applicable information.

SECTION 4 - FIRST-AID MEASURES

Skin	Wash contaminated area thoroughly with soap and water.
Eyes	Remove any contact lenses at once. Flush eyes with water for at least 20 - 30 minutes and seek medical attention.
Ingestion	Contact a physician, hospital or Poison Control Center at once. DO NOT INDUCE VOMITING. If conscious and not convulsing, give a glass of milk or water.
Inhalation	Immediately 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	176°F (80°C) SETA CC
FLAMMABLE LIMITS	Unknown
AUTOIGNITION POINT	Unknown
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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. In case of fire near storage area, cool the containers with water spray.
UNUSUAL FIRE AND EXPLOSION HAZARDS	During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. The heat of decomposition of the peroxides adds to the heat of the fire. Caution should be observed due to possible unexpected increases in fire intensity. Chemicals may explode when exposed to heat.

NOROX[®] 300-70**SECTION 6 - ACCIDENTAL RELEASE MEASURES****STEPS TO BE TAKEN IN
EVENT OF SPILL OR
RELEASE**

Evacuate area of all unnecessary personnel. Remove all sources of ignition. Refer to protective measures listed in sections 7 and 8. Spilled material should be swept up with an inert, moist diluent such as perlite, vermiculite, or sand. 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. Add water to 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. Avoid breathing vapors and use with adequate ventilation. 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. Take precautionary measures against static discharge. Keep in original container. DO NOT USE NEAR FOOD OR DRINK. Wash thoroughly after handling.

STORAGE

The activity and stability of many organic peroxide formulations is directly related to the shipping and storage temperature history. Cool storage at 75°F (24°C) or below is recommended for longer shelf life and stability. Prolonged storage at elevated temperatures 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. 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. If necessary use NIOSH/MSHA approved cartridge respirator with organic vapor cartridges. In case of spill or leak of unknown concentration, use NIOSH/MSHA approved supplied air respirator.

EYE PROTECTION

Safety goggles recommended, goggles with a face shield are preferred.

HAND PROTECTION

Protective gloves recommended, solvent resistant.

OTHER

A safety shower and eyewash is highly recommended when the risk of a significant exposure exists.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**APPEARANCE AND ODOR:**

Transparent to slightly yellow liquid with an aromatic odor.

BOILING POINT:

Decomposes

SPECIFIC GRAVITY

.93 - .96 at 20°C (Water = 1)

VAPOR PRESSURE:

Unknown

FLASH POINT:

~ 176°F (80°C)

VAPOR DENSITY:

Unknown

FLAMMABLE LIMITS:

Unknown

EVAPORATION RATE:

Unknown

SADT:

>80°C

% VOLATILE BY VOLUME:

Unknown

pH:

Not applicable

SOLUBILITY IN WATER:

Insoluble

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SECTION 10 - STABILITY AND REACTIVITY

STABILITY	Stable.
CONDITIONS TO AVOID	Storage in direct sunlight, heat (temperatures exceeding 30°C), flames, sparks. Prevent product contamination.
MATERIALS TO AVOID	Promoters, accelerators, metals, amines, strong acids, corrosives, oxidizing and reducing agents, or any hot material.
HAZARDOUS DECOMPOSITION PRODUCTS	Ketones, acetone, t-butanol, isobutylene, and etc.
HAZARDOUS POLYMERIZATION	Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Isopropylcumyl Hydroperoxide [Hydroperoxide, diisopropylphenyl-, (solution)]

Hazard Data: Data of 53% peroxide

Inhalation: Rat--LC₅₀: 4.5mg/l (4hrs).

Oral: Rat--LD₅₀: 6200.

Skin: Rabbit, severe irritation [immediate].

Eye: Rabbit, unwashed; severe. Washed; severe. Corneal opacity still present 14 days after dosing.

Hazard Data: Data of not more than 72% peroxide in solution

Tumorigenic: unreported route; Mouse--TD_{Lo}: 391 mg/kg (Equivocal tumorigenic agent by RTECS criteria); lungs, thorax or respiration(tumors); blood (lymphoma including Hodgkin's disease).

1,3-Diisopropylbenzene

Hazard Data:

Inhalation: Mouse--TC_{Lo} 1gm/m³/5H/22W-I, liver (liver function tests impaired).

Inhalation: Rat--TC_{Lo} 1gm/m³/5H/22W-I, brain and coverings (recordings from specific areas of CNS), liver (liver function tests impaired).

Intraperitoneal: Mouse--LD₅₀: 1650 mg/kg, peripheral nerve and sensation (flaccid paralysis without anesthesia, usually neuromuscular blockage), behavioral (tremor, excitement).

Oral: Mouse--LD₅₀: 3100 mg/kg, behavioral, (muscle contraction or spasticity, alteration of classical conditioning), blood (P71)

Oral: Rat--LD₅₀: 7400 mg/kg, peripheral nerve and sensation (flaccid paralysis without anesthesia, usually neuromuscular blockage), behavioral (tremor, excitement).

o-Diisopropylbenzene

Hazard Data:

Oral: Rat--LD_{Lo}: 5000 mg/kg.

1,4-Diisopropylbenzene

Hazard Data:

Intraperitoneal: Mouse--LD₅₀: 1650 mg/kg, peripheral nerve and sensation (flaccid paralysis without anesthesia, usually neuromuscular blockage), behavioral (tremor, excitement).

Oral: Mouse--LD₅₀: 3400 mg/kg, behavior (general anesthetic, convulsions or effect on seizure threshold), Lung, thorax, or respiration (other changes).

SECTION 12 - ECOLOGICAL INFORMATION

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

Ecotoxicity: Isopropylcumyl Hydroperoxide:
 EC₅₀ (Daphnia magnay); 8.2 mg/L/48-hr
 EC₅₀ (Scenedesmus subspicatus); 10.8 mg/L/72-hr
 LC₅₀ (Fish species); 10.6 mg/L/48-hr
 NOEC(Scenedesmus subspicatus); 1.3 mg/L/72-hr

NOROX[®] 300-70**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.

Controlled burning is the preferred disposal method. This material may be burned in a chemical incinerator equipped with an afterburner and a scrubber. Dilution of peroxide to no more than 1% of the active oxygen or no more than 10wt% of the concentration (whichever is lower) in an inert organic solvent (which are readily soluble with the peroxide) is recommended.

SECTION 14 - TRANSPORT INFORMATION

DOT Shipping Name: ORGANIC PEROXIDE TYPE F, LIQUID,

(Isopropylcumyl hydroperoxide, ≤72%)

DOT Hazard Class: 5.2 (8)

UN/NA ID No.: UN3109

DOT Packing Group: PG II

Labels: 5.2 (Organic Peroxide), 8 (Corrosive)

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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		

TSCA Status

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

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.

Japanese Existing and New Chemical Substances (ENCS) List

This product is listed in the Japanese Existing and New Chemical Substances (ENCS) List.

Status of Carcinogenicity

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

SECTION 16 - OTHER INFORMATION**NFPA 432 Organic Peroxide Classification**

Class III

NFPA 704 Rating

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

HMIS Rating

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

MSDS Reference: Norox 300-70 MSDS 0709

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