



MATERIAL SAFETY DATA SHEET

NOROX[®] 410-50OMS

Syrgis Performance
Initiators, Inc.
Helena, AR

SECTION 1 - IDENTIFICATION OF THE PRODUCT AND THE COMPANY

PRODUCT NAME	NOROX [®] 410-50OMS	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	tert-Butyl peroxy-2-ethylhexanoate	CAS NO.	See section 2.
CHEMICAL FAMILY	Peroxyester	CHEMICAL FORMULA	C ₁₂ H ₂₄ O ₃

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

<u>COMPONENTS</u>	<u>CAS NO.</u>	<u>%</u>
tert-Butyl peroxy-2-ethylhexanoate	3006-82-4	50
Odorless mineral spirits	8032-32-4	50

SECTION 3 - HAZARD IDENTIFICATION OF THE PREPARATION

PHYSICAL HAZARDS	Organic Peroxide. Decomposition.
HEALTH HAZARDS	Irritant.
EXPOSURE LIMITS	For OMS: TWA 300 ppm, STEL 400 ppm.
ROUTES OF EXPOSURE	
Skin Contact	May produce moderate skin irritation including redness, swelling, drying and scaling, thickening depigmentation, and hair loss.
Eye Contact	May produce moderate to severe eye and mucous membrane irritation.
Ingestion	Relatively non-toxic by ingestion. May cause mucous membrane irritation and diarrhea. If swallowed may be aspirated resulting in inflammation and possible fluid accumulation in the lungs.
Inhalation	May be moderately irritating to the nose, throat and mucous membranes. May produce slight difficulty in breathing at high concentrations.
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	DO NOT INDUCE VOMITING. 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	131°F (55°C), SETA CC
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, 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[®] 410-50OMS**SECTION 6 - ACCIDENTAL RELEASE MEASURES****STEPS TO BE TAKEN IN EVENT OF SPILL OR RELEASE**

Evacuate area of all unnecessary personnel. Refer to protective measures listed in sections 7 and 8. Observe storage temperature limitations. Dilute spilled material with mineral spirits. The addition of mineral spirits 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.

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. Keep in original container. DO NOT USE NEAR FOOD OR DRINK. Wash thoroughly after handling.

STORAGE

Store in original containers and keep sealed. Cool storage at 50°F (10°C) or below is recommended for longer shelf life and stability. Prolonged storage at elevated temperatures of 86°F (30°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. 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 or in case of spill or leak of unknown concentration. 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.

EYE PROTECTION

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

HAND PROTECTION

Protective gloves recommended, neoprene or nitrile rubber (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:**

Clear, colorless liquid with a mild odor.

BOILING POINT:

Decomposes.

SPECIFIC GRAVITY:

.8 at 25°C

VAPOR PRESSURE:

Not established.

FLASH POINT:

131°F (55°C), SETA CC

VAPOR DENSITY:

Not established.

FLAMMABLE LIMITS:

Not established.

EVAPORATION RATE:

<1 (ethyl ether = 1)

SADT:

Not established.

% VOLATILE BY VOLUME:

100

pH:

Not applicable.

SOLUBILITY IN WATER:

Negligible.

SECTION 10 - STABILITY AND REACTIVITY**STABILITY**

Unstable.

CONDITIONS TO AVOID

Contamination. Storage in direct sunlight, heat, flames, sparks. Prolonged storage above 86°F (30°C). Storage above SADT. Storage near flammable or combustible materials.

MATERIALS TO AVOID

Promoters, accelerators, metals, acids, corrosives, oxidizing and reducing agents, or any hot material.

HAZARDOUS DECOMPOSITION PRODUCTS

Decomposition produces flammable gasses. Various carbon oxides and hydrocarbons.

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HAZARDOUS POLYMERIZATION Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION**t-Butyl peroxy-2-ethylhexanoate****Hazard Data:**Oral: Rat--LD₅₀: 10000 mg/kg.Dermal: Rabbit--LD₅₀: 16818 mg/kg**Odorless mineral spirits****Hazard Data:**

Eye: Human: 880 ppm/15M.

Inhalation: Rat--LC₅₀: 3400 ppm/4HIntravenous: Mouse--LD₅₀: 40 mg/kg**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

DOT Shipping Name: ORGANIC PEROXIDE TYPE E, LIQUID,
TEMPERATURE CONTROLLED
(TERT-BUTYL PEROXY-2-ETHYLHEXANOATE, 50%)

DOT Hazard Class: 5.2

UN/NA ID No.: UN3117

DOT Packing Group: PG II

Control Temperature: +30°C (86°F)

Emergency Temperature: +35°C (95°F)

Labels: 5.2 (Organic Peroxide)

2004 ERG GUIDE NO.: 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.

Korean Existing Chemicals List (ECL)

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

NOROX[®] 410-50OMS**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.

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

Class III - 55 gal containers

Class IV - 5 gal containers

NFPA 704 Rating

Health

1

Flammability

2

Reactivity

2

HMIS Rating

Health

1

Flammability

2

Reactivity

2

MSDS Reference: Norox 410-50OMS 0709

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