

# **MATERIAL SAFETY DATA SHEET**

# NOROX® 757 FRED

Syrgis Performance Initiators, Inc.

Helena, AR

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

PRODUCT NAME MANUFACTURER

**ADDRESS** 

NOROX® 757 FRED

Syrgis Performance Initiators, Inc. 334 Phillips 311 Rd., Helena, AR 72342

CHEMICAL NAME Acetyl Acetone Peroxide (AAP) and Cumene

Hydroperoxide (CHP) Mixture

CHEMICAL FAMILY Organic Peroxide - Ketone Peroxide and

Hydroperoxide Mixture

**TELEPHONE** 870-572-2935

CHEMTREC (24hr) (USA) 800-424-9300 (Maritime/International) 703-527-3887 See section 2.

CHEMICAL FORMULA Mixture of many.

# **SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS**

<u>COMPONENTS</u>	<u>CAS NO.</u>	<u>%</u>
Acetyl Acetone Peroxide	37187-22-7	17 <del>-</del> 20
Cumyl Hydroperoxide	80-15-9	11 - 12
Aliphatic Glycol Ether	Proprietary	33 - 34
Phlegmatizers	Proprietary	30 - 32
Water	7732-18-5	5 - 6
Cumene	98-82-8	1 - 2

## **SECTION 3 - HAZARD IDENTIFICATION OF THE PREPARATION**

PHYSICAL HAZARDS Organic Peroxide. Decomposition.

**HEALTH HAZARDS** Severe irritant.

**EXPOSURE LIMITS** The TLV/PEL limit is 50 ppm for Cumene.

**ROUTES OF EXPOSURE** 

**Skin Absorption** Severe skin irritant causes, redness, blistering, and edema. Eye Contact Eye contact causes severe corrosion and may cause blindness.

**Ingestion** Human systemic effects by ingestion: changes in structure or function of esophagus,

nausea, or vomiting, and other gastrointestinal effects.

Inhalation Inhalation of vapors may result in headache, dizziness, sneezing, loss of

coordination, and CNS depression

**EFFECTS OF OVER-EXPOSURE** High concentrations and prolonged exposure may cause pulmonary edema and

emphysema.

# **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 Contact a physician, hospital or Poison Control Center at once. DO NOT INDUCE

VOMITING.

**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>200°F (93°C), C.O.C.FLAMMABLE LIMITSNot established.AUTOIGNITION POINTNot established.

FIRE EXTINGUISHER 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. Dry chemical combined with AAP/CHP may reignite. Light water additives

may be particularly effective at extinguishing AAP/CHP fires.

Revised on: 1/18/2010 Printed On: 1/18/2010 Page 1 of 4

# NOROX® 757 FRED

SPECIAL FIRE FIGHTING PROCEDURES

Firefighters should be equipped with protective clothing and SCBA's. In case of fire near storage area, cool the containers with water spray. If dry chemical is used to extinguish an AAP/CHP fire, the extinguished area must be thoroughly wetted down with water to prevent re-ignition. If material is confined in rigid containers, they may rupture violently.

UNUSUAL FIRE AND EXPLOSION HAZARDS

The heat of decomposition of the peroxides adds to the heat of the fire. Dry chemical fire extinguishing agent may catalyze the decomposition.

# **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

STEPS TO BE TAKEN IN EVENT OF SPILL OR RELEASE

Dike to prevent runoff from entering drains, sewers, streams, etc. and transfer into containers. Spilled material should be swept up with an inert, moist diluent such as perlite, vermiculite, or sand, and placed in a clean polyethylene lined drum or a polyethylene drum. Add water prior to sealing container.

## **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 solvents or monomers as a violent decomposition and/or reaction may result. When using spray equipment, never spray raw AAP/CHP onto curing or into raw resin or flues. Keep in original container. DO NOT USE NEAR FOOD OR DRINK. Wash

thoroughly after handling.

STORAGE The stability of AAP/CHP mixtures is directly related to the shipping and storage

temperature history. Cool storage at 80°F (27°C)or below is recommended for longer shelf life and stability. Prolonged storage at elevated temperatures of 100°F (38°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**

**RESPIRATORY PROTECTION** If airborne concentrations are expected to exceed acceptable levels wear a NIOSH

approved air-purifying respirator with an organic vapor cartridge or canister. When

using respirators refer to OSHA's 29CFR 1910.134.

**VENTILATION** Mechanical, general.

**EYE PROTECTION**Safety goggles recommended. Permanent eyewash is highly recommended.

**HAND PROTECTION** Protective gloves recommended (solvent resistant).

OTHER A safety shower and eyewash is recommended when the risk of a significant

exposure exists.

# **SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE AND ODOR: Red liquid with a slight odor.

BOILING POINT: Not established. SPECIFIC GRAVITY: 1.1 - 1.2

VAPOR PRESSURE: Not established. FLASH POINT: >200°F (93°C), C.O.C.

VAPOR DENSITY:>1FLAMMABLE LIMITS:Not established.EVAPORATION RATE:Not established.SADT:60°C (140°F)% VOLATILE BY VOLUME:Not established.pH:Not applicable

**SOLUBILITY IN WATER:** Moderately soluble in water.

# NOROX® 757 FRED

## **SECTION 10 - STABILITY AND REACTIVITY**

STABILITY Stable when kept in original, closed container, out of direct sunlight at temperatures

below 80°F (27°C).

CONDITIONS TO AVOID Contamination. Direct sunlight. Open flame. Prolonged storage above 100°F

(38°C). Storage above SADT. Storage near flammable or combustible materials. Metallic contamination, amines, organic metal salts, strong oxidizing and reducing

agents, mineral acids, alkalis, promoters and promoted resins or any hot material.

HAZARDOUS DECOMPOSITION Decom

Decomposition products are potentially flammable. Carbon dioxide, carbon

**PRODUCTS** monoxide, dense smoke and intense heat.

HAZARDOUS POLYMERIZATION Will not occur.

# **SECTION 11 - TOXICOLOGICAL INFORMATION**

### **Cumyl Hydroperoxide**

**MATERIALS TO AVOID** 

**Hazard Data:** 

**Inhalation:** Rat--LC<sub>50</sub>: 220 ppm/4hr. **Intraperitoneal:** Rat--LD<sub>50</sub>: 95 mg/kg.

Oral: Rat--LD<sub>50</sub>: 382 mg/kg, kidney, ureter, and bladder, hematuria.

**Skin:** Rabbit--LD<sub>50</sub>: 500 mg; Rat--LD<sub>50</sub>: 500 mg/kg.

**Subcutaneous:** Rat--LD<sub>50</sub>: 382 mg/kg.

**Acetyl Acetone Peroxide** 

**Hazard Data:** 

No hazard data for this component.

Aliphatic Glycol Ether

**Hazard Data:** 

Oral: Rat--LD<sub>50</sub>: 3300 mg/kg

Phlegmatizers
Hazard Data:

Oral: Rat--LD<sub>50</sub>: 7 cc/kg.

Cumene

**Hazard Data:** 

**Inhalation:** Rat--LC<sub>Lo</sub>: 8000 ppm/4hr; Mouse--LC<sub>50</sub>: 10 gm/m<sup>3</sup>/7hr, liver, multiple effects kidney, ureter, and bladder changes in both tubules and glomeruli blood - changes in spleen.

Oral: Rat--LD<sub>50</sub>: 1400 mg/kg, gastrointestinal - gastritis; Mouse --LD<sub>50</sub>: 12750 mg/kg.

Skin: Rabbit--LD<sub>50</sub>: 12300 µL/kg.

Severe irritating to the skin may cause including redness, blistering, and edema. May be harmful if absorbed through the skin. Irritating to the eyes may cause severe corrosion and blindness. Harmful if swallowed. May be harmful if inhaled. Prolonged inhalation of vapors may cause mucous membrane irritation and vertigo.

## 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.

## **SECTION 14 - TRANSPORT INFORMATION**

**DOT Shipping Name:** ORGANIC PEROXIDE TYPE D LIQUID

(ACETYL ACETONE PEROXIDE, ≤20%, CUMYL HYDROPEROXIDE, ≤12%)

DOT Hazard Class: 5.2 UN/NA ID No.: UN3105 DOT Packing Group: PG II

**DOT RQ** RQ, required if shipping container has greater than 83.3 lbs.

Labels: 5.2 (Organic Peroxide)

# NOROX® 757 FRED

**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

 Cumene Hydroperoxide
 80-15-9
 11 - 12

 Cumene
 98-82-8
 1 - 2

Call Syrgis Performance Initiators, Inc. for information regarding proprietary chemicals in this product that 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.

#### Reportable Quantity

alpha, alpha-Dimethylbenzylhydroperoxide (CHP): 10 lbs (4.54 kg)

#### **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**

#### **VOC Information**

Using ASTM Test Method D-2369-87, but at 39°C (since CHP and Acetyl Acetone Peroxide decompose rapidly above 100°C), NOROX® 757 contains 12.5% VOC, by weight, or 144 grams per liter. For more information call Syrgis Performance Initiators, Inc.

#### NFPA 432 Organic Peroxide Classification

Class III

NFPA 704 Rating HMIS Rating

HealthFlammabilityReactivityHealthFlammabilityReactivity2222

MSDS Reference: Norox 757 FRED MSDS 0904.doc

#### DISCLAIMER OF LIABILITY

The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use, or disposal of the product.

This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable