

BRIDGE DECK & ROADWAY REHABILITATION SYSTEMS

MSDS: CHP

Emergency Phone Number: (800) 373-7542

SECTION 1 IDENTIFICATION

Product Name: Cumyl Hydroperoxide, CHP-158, Norox CHP

CAS#: 80-15-9

Components	CAS No.	% by weight
Cumyl Hydroperoxide	80-15-9	80-90
Cumene	98-82-8	2-15.5
a,a, Dimethylbenzyl alcohol	617-94-7	4-8
Acetophenone	98-86-2	.5-1.5

Product Code: None Assigned

Chemical Family: Organic Peroxide

Formula: Mixture

SECTION 2 PHYSICAL DATA

Boiling Point F: N/A Decomposes

Vapor Pressure mm Hg: 13.9 at 20 C

Vapor Density: 5.4

Solubility in Water: Slightly

Appearance and Odor: Colorless to pale yellow liquid with a sharp, aromatic odor

Specific Gravity: 1.05

% Volatile by volume: 2% at 20 C

Evaporation Rate: .06

Specific Gravity: 1.0

Flash Point: 162 F

SADT: >60 F

pH: Not applicable

SECTION 3 HEALTH HAZARD INFORMATION

Physical Hazards: Organic Peroxide. Decomposition

Health Hazards: Severe Irritant

Threshold Limit Value: 50 ppm Cumene, not established for cumyl hydroperoxide

Routes of Exposure

Eye: Eye contact may cause damage. Will cause tearing, blurred vision, severe reddening of the eyes.

Skin: Prolonged exposure may cause irritation and blistering

Inhalation: Prolonged inhalation causes headaches and throat irritation.

Ingestion: Ingestion may cause severe irritation and burns of the stomach lining

Effects of Over Exposure: There are no known medical conditions which are recognized as being aggravated by exposure

SECTION 4 EMERGENCY AND FIRST AID PROCEDURES

Eye Contact: Immediately flush with large amounts of water for 15 minutes. See medical aid.

Skin Contact: Remove contaminated clothing. **Wash thoroughly with soap and water.** If irritation persists, seek medical aid. Wash contaminated clothing before reuse.

Inhalation: Remove from exposure. If **breathing has stopped or** is difficult, administer artificial respiration or oxygen as indicated. See medical aid.

Ingestion: DO NOT INDUCE VOMITING. Dilute immediately with water. Call a physician. For aid to physician, suggest Poison Control Center.

Note to Physician: Patient should be examined for burns to mouth, throat, esophagus, and stomach. Large volumes of ingested CHP should be removed by gastric lavage with a large bore tube being careful not to cause aspiration of the compound during the removal.

SECTION 5 FIRE AND EXPLOSION HAZARD INFORMATION

Flash Point & Method: > 162 F 72 C

Autoignition Temp: ND

Flammable Limits (% by volume/air):

Lower: ND **Upper:** ND

Extinguishing Media: Use water spray, carbon dioxide, dry chemical or foam.

Fire-fighting procedures: Wear complete fire service protective equipment, including full-face MSHA/NIOSH approved self-contained breathing apparatus. Use water to cool fire-exposed container/structure/protect personnel. Large fires: fire fighting best done at a distance/protected location.

Fire and Explosion Hazards: Heat/fire conditions: Exposure of containers to fire results in rapid product decomposition, container pressure build-up and failure, followed by vigorous burning with flare effect. Cleanup should not be attempted until all of the product has completely cooled.

SECTION 6 SPILL, LEAK, AND DISPOSAL INFORMATION

Spill or Leak Procedures: Stop leak if no risk involved. Stay upwind. Small spills: Take up with sand or other noncombustible absorbent material. Flush area with water. Dike large spills for later disposal. Contain runoff from fire control and dilution water. Large spills: dike to contain and pump into clean, dry, covered steel drums for disposal. Dispose of promptly.

Waste Disposal: Dispose of in accordance with local, state, and federal regulations.

SECTION 7 PERSONAL PROTECTION INFORMATION

Eye Protection: Industrial safety glasses, minimum. As necessary to comply with 29 CFR 1910.133 and work area conditions: use side shields, goggles or face shield. Chemical goggles; face shield (if splashing is possible).

Skin Protection: As required, industrial resistant flexible-type gloves (polyvinyl alcohol, **polyethylene, or equal – see Section 8**). Wear industrial-type work clothing and safety footwear. Depending on working conditions, i.e., contact potential, wear resistant protective garments such as aprons, jackets, pants, coveralls, boots, etc.

Respiratory Protection: Not required under normal use conditions. If ventilation does not maintain inhalation exposures below TLV(PEL), use MSHA/NIOSH approved units as per current exposure limits and areas below flammable vapor concentrations. Local exhaust is necessary for use in enclosed or confined spaces.

SECTION 8 PERSONAL HANDLING INSTRUCTIONS

Handling: Avoid prolonged or repeated breathing of vapors, mists or fumes. Avoid prolonged or repeated contact with skin or eyes. Handle and use in accordance with OSHA 29CFR1910.106/local codes. Do not wear contaminated clothing. Discard contaminated footwear. See Section 10 – Reactivity Data.

Storage: Store in areas/buildings designed to comply with OSHA 1910.106. Keep in a closed, labeled container within a cool (well shaded), dry – ventilated area. Protect from physical damage.

Other: Not for use or storage in or around the home. Do not use pressure to empty drums. Do not use without fully understanding Section 9 – Reactivity Data. See Section 12 - Comments for additional information.

SECTION 9 REACTIVITY DATA

Conditions Contributing to Instability(Incompatibility): Acids and acidic-type materials such as Friedel-Crafts catalysts, oxidizing and reducing agents, and oxidation catalysts. Lead copper, copper alloys, and zinc-galvanized materials.

Stability Stable at room temperatures. Avoid temperatures above 100 F or contact with materials listed above. Higher temperatures or contact with listed materials promote exothermic decomposition and potential flash fire.

Hazardous Decomposition

Products: ketones, alcohols, methane, and ethane. Under acidic decomposition conditions, phenols may be formed. Combustion products include carbon monoxide, carbon dioxide, and generation of smoke.

SECTION 10 TOXICOLOGICAL INFORMATION**Cumyl Hydroperoxide****Hazard Data**

Inhalation: Mouse and Rat- LC50 200 ppm/4 hr, lung, thorax, respiration, or dyspnea

Intraperitoneal: Rat-LD50 95mg/kg, behavioral, muscle weakness behavioral, ataxia; Mouse LD50: 270 mg/kg

Oral: Rat LD50-382 mg/kg, kidney, ureter, and bladder, hematuria

Subcutaneous: Rat-LD50 382 mg/kg; Mouse-LD50 490 mg/kg

Cumene**Hazard Data**

Inhalation: Rat-LC50 8000ppm/4hr; Mouse LC50 10 gm/cm/7hr, multiple effects kidney, ureter, and bladder, changes in both tubules and glomeruli blood, changes in spleen.

Oral: Rat LD50 1400 mg/kg, gastrointestinal, gastritis; mouse LD50 12750 mg/kg

Skin: Rabbit LD50 12300 ul/kg

Dimethylbenzyl Alcohol**Hazard Data**

Oral: Rat LD50 1300 mg/kg; mouse LD50 1400 mg/kg

Skin: Rabbit LD 50 4300 mg/kg

Acetophenone**Hazard Data**

Inhalation: Rat LC50 >210 ppm/8hr; mammal LC50 1200 mg/m3

Intraperitoneal: Mouse LD50 200 mg/kg

Oral: Rat LD50 815 mg/kg; Mouse LD50 740 mg/kg; mammal(unspecified) 2700 mg/kg

Skin: Rabbit LD50 15900 ul/kg; Guinea Pig LD50 >20ml/kg

Subcutaneous: Mouse LD50 330 mg/kg

SECTION 11 ECOLOGICAL CONSIDERATIONS

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

SECTION 12 DISPOSAL CONSIDERATIONS

Waste must be disposed of in accordance with federal, state, provincial and local regulations.

Container Disposal: Empty containers by removing the top and inverting to allow all free flowing product to drain. To meet regulatory criteria, the container is considered empty when less than 3% remains in the

container. Additional special handling is not typically required and the empty container can be discarded with other non-hazardous trash.

Note: Local disposal regulations may be more stringent and require additional restrictions or precautions. Customers should check with their local disposal company, municipal or state authority. Recycle of plastic or metal containers may require clean rather than empty containers. In this case the containers can be rinsed with mineral spirits until the containers are considered generally product free.

SECTION 13 TRANSPORTATION INFORMATION

DOT Shipping Name: Organic Peroxide Type F, Liquid (Cumyl Hydroperoxide, <=90%)

DOT Hazard Class: 5.2

UN/NA ID No: UN 3109

DOT Packaging Group: PGII

SECTION 14 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
Cumyl Hydroperoxide	80-15-9	80-90%
Cumene	98-82-8	2-15.5%

Status of Carcinogenicity: Not recognized as a carcinogen by the IARC, NTP, or OSHA

EINECS Status: The ingredient in this product is listed in the European Inventory of Existing Commercial Chemical Substances

ENCS Status: The ingredient in this product is listed in the Japanese Existing and New Chemical Substances listing.

PICCS Status: The ingredient in this product is listed in the Philippines Inventory of Chemicals and Chemical Substances.

TSCA: The product is listed in the US Toxic Substances Control Act Inventory.

SECTION 15 OTHER INFORMATION

VOC Information: Using ASTM Test Method D-2369-87, but at 40 C CHP contains 11.5% VOC, by weight or 121 grams/liter

NFPA 432 Organic Peroxide Classification: Class III

NFPA 704 Rating:

Health	Flammability	Reactivity
3	2	2

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