TEDIA

Material Safety Data Sheet

Tedia Company, Inc. 2880 Symmes Road Fairfield, OH 45014 USA 24 Hour Emergency Number (CHEMTREC) USA: 800-424-9300 • International: 703-527-3887

All non-emergency questions should be directed to Customer Service: 800-PURITY-1 for assistance

Hydrogen Peroxide 3%

MSDS No. M0122

Date Revised: 4/4/00

1. CHEMICAL PRODUCT IDENTIFICATION

Product Name: Hydrogen Peroxide 3% Product Catalog Number(s): HR-0886

Synonyms: Carbamide Peroxide, Hydrogen Dioxide, Hydroperoxide, Urea Peroxide

Molecular Formula: H₂O₂ Molecular Weight: 34.02

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s) CAS Number % (by weight)

Water 7732-18-5 97 Hydrogen Peroxide 7722-84-1 3

3. HAZARDS IDENTIFICATION

CAUTION! MAY CAUSE EYE AND SKIN IRRITATION. MAYCAUSE RESPIRATORY AND DIGESTIVE TRACT IRRITATION.

NFPA Hazard Ratings: Health - 0, Flammability - 0, Reactivity - 1

NOTE: NFPA ratings involve data and interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

Potential Health Effects

Eye: Produces irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury. Vapors may cause eye irritation.

Skin: May cause skin irritation.

Ingestion: May cause irritation of the digestive tract.

Inhalation: May cause respiratory tract irritation. Irritation may lead to chemical pneumonitis and pulmonary

edema.

Chronic: Not available.

Target Organs: Respiratory system.

4. FIRST AID MEASURES

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Get medical aid immediately. Do NOT allow victim to rub or keep eyes closed.

Skin: Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

Ingestion: Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately. Call a poison control center.

Inhalation: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

Antidote: No specific antidote exists.

5. FIRE FIGHTING MEASURES

Flash Point: Not applicable Explosive Limit: Not applicable Autoignition Temperature: No data

Hazardous Products of Combustion May form: acetic acid.

Fire and Explosion Hazards: Substance is an oxidizer. Will increase fire hazard if in contact with combustibles.

Extinguishing Media: water fog, carbon dioxide, dry chemical.

Fire Fighting Instructions: Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

6. ACCIDENTAL RELEASE MEASURES

Small Spill: Absorb liquid on vermiculite, floor absorbent, or other absorbent material and transfer to hood.

Large Spill: Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal. Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred. Persons not wearing protective equipment should be excluded from area of spill until clean-

7. HANDLING AND STORAGE

Handling: Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection: Chemical splash goggles and face shield (8" min.) in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. (Consult your industrial hygienist.)

Skin Protection: Wear impervious gloves (consult your safety equipment supplier). To prevent skin contact, wear impervious clothing and boots..

Respiratory Protections: If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

Engineering Controls: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

Exposure Guidelines Component

Water (7732-18-5) No exposure limits established

Hydrogen Peroxide (7722-84-1) OSHA VPEL 1.000 ppm - TWA ACGIH TLV 1.000 ppm - TWA

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: (for component) $212.0 \,\mathrm{F} \,(100.0 \,\mathrm{C})$ @ $760 \,\mathrm{mmHg}$

Vapor Pressure: (for product) 24.000 mmHg @ $86.00 \, \mathrm{F}$

Specific Vapor Density: No data Specific Gravity: 1.000 @ 60.00 F Liquid Density: 8.330 lbs/gal @ 60.00 F

Percent Volatiles: No data Evaporation Rate: Not applicable

Appearance: CLEAR State: LIQUID

Physical Form: HOMOGENEOUS SOLUTION

Color COLORLESS Odor: No data pH: 3.6

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10. STABILITY AND REACTIVITY

Hazardous Polymerization: Product will not undergo hazardous polymerization.

Hazardous Decomposition: No data

Chemical Stability: Stable. Avoid heat, open flame, and prolonged storage at elevated temperatures.

Incompatibility Avoid contact with: combustible materials, copper, cyanides, ferrous metals, heavy metals, organic materials, reducing agents, strong oxidizing agents.

11. TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 7722-84-1: MX0899000 MX0900000

CAS# 7732-18-5: ZC0110000

LD50/LC50: CAS# 7722-84-1:

Inhalation, rat: LC50 = 2 gm/m3/4H; Oral, mouse: LD50 = 2 gm/kg; Skin, rat: LD50 = 4060 mg/kg;

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg;

Carcinogenicity: CAS# 7722-84-1:

ACGIH: A3 - Animal Carcinogen

IARC: Group 3 carcinogen CAS# 7732-18-5: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology: No information available.
Teratogenicity: No information available.
Reproductive Effects: No information available.
Neurotoxicity: No information available.
Mutagenicity: No information available.

Other Studies: None.

RTECS#:

CAS# 7722-84-1: MX0899000 MX0900000

CAS# 7732-18-5: ZC0110000

12. ECOLOGICAL INFORMATION

Ecotoxicity: Fingerling trout, >40 ppm/48H is toxic. Fathead minnow LC50=22-35 gm/L/96H

Environmental Fate: No information reported. Physical/Chemical: No information available.

Other: None.

13. DISPOSAL CONSIDERATION

Dispose of in a manner consistent with federal, state, and local regulations.

RCRA D-Series Maximum Concentration of Contaminants: None listed.

RCRA D-Series Chronic Toxicity ReferenceLevels: None listed.

RCRA F-Series: None listed. RCRA P-Series: None listed. RCRA U-Series: None listed.

14. TRANSPORT INFORMATION

Not regulated.

15. REGULATORY INFORMATION

US FEDERAL.

TSCA

CAS# 7722-84-1 is listed on the TSCA inventory.

CAS# 7732-18-5 is listed on the TSCA inventory.

Health & Safety Reporting List: None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules: None of the chemicals in this product are under a Chemical Test Rule.

Section 12b: None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule: None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ): None of the chemicals in this material have an RQ.

Section 302 (TPQ): CAS# 7722-84-1: concentration > 52%: TPQ = 1000 pounds; RQ = 1000 pounds

SARA Codes: CAS # 7722-84-1: acute, flammable.

Section 313: No chemicals are reportable under Section 313.

Clean Air Act: This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors.

Clean Water Act: None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA: CAS# 7722-84-1 is considered highly hazardous by OSHA.

STATE: CAS# 7722-84-1 can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

CAS# 7732-18-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California No Significant Risk Level: None of the chemicals in this product are listed. European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: O C

Risk Phrases: R 36/38 Irritating to eyes and skin.

Safety Phrases: S 28 After contact with skin, wash immediately with plenty of ... (to be specified by the manufacturer). S 36/39 Wear suitable protective clothing and eye/face protection.

WGK (Water Danger/Protection)

CAS# 7722-84-1: 0

CAS# 7732-18-5: No information available.

Canada

CAS# 7722-84-1 is listed on Canada's DSL/NDSL List.

CAS# 7732-18-5 is listed on Canada's DSL/NDSL List.

This product has a WHMIS classification of D2B.

CAS# 7722-84-1 is not listed on Canada's Ingredient Disclosure List.

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

posure Limits

CAS# 7722-84-1: OEL-AUSTRALIA: TWA 1 ppm (1.5 mg/m3) OEL-BELGIUM: TWA 1 ppm (1.4 mg/m3) OEL-DENMARK: TWA 1 ppm (1.4 mg/m3) OEL-FINLAND: TWA 1 ppm (1.4 mg/m3); STEL 3 ppm (4.2 mg/m3) OEL-FRANCE: TWA 1 ppm (1.5 mg/m3) OEL-GERMANY: TWA 1 ppm (1.4 mg/m3) OEL-THE NETHERLANDS: TWA 1 ppm (1.4 mg/m3) OEL-THE PHILIPPINES: TWA 1 ppm (1.4 mg/m3) OEL-SWITZERLAND: TWA 1 ppm (1.4 mg/m3); STEL 2 ppm (2.8 mg/m3) OEL-TURKEY: TWA 1 ppm (1.4 mg/m3) OEL-UNITED KINGDOM: TWA 1 ppm (1.5 mg/m3); STEL 2 ppm (3 m g/m3)

16. OTHER INFORMATION

The information contained herein is based on current knowledge and experience; no responsibility is accepted that the information is sufficient or correct in all cases. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers and the protection of the environment.

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