

Mallinckrodt

Material Safety Data

Emergency Phone Number: 314-982-5000

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PHENOLPHTHALEIN SOLUTIONS

PRODUCT IDENTIFICATION:

Synonyms: 3,3-Bis(p-hydroxyphenyl) phthalide indicator solutions

Formula CAS No.: Not applicable to mixtures.

Molecular Weight: Not applicable.

Chemical Formula: Not applicable to mixtures.

Hazardous Ingredients:

CAS No. 77-09-8 : Phenolphthalein

CAS No. 64-17-5 : Ethyl Alcohol

CAS No. 67-56-1 : Methyl alcohol

CAS No. 67-63-0 : Isopropyl alcohol

PRECAUTIONARY MEASURES

DANGER! MAY BE FATAL IF SWALLOWED.

HARMFUL IF INHALED OR ABSORBED THROUGH SKIN.

FLAMMABLE! AFFECTS CENTRAL NERVOUS SYSTEM. MAY CAUSE BLINDNESS.

Keep away from heat, sparks and flame.

Keep container closed.

Avoid breathing mist.

Use with adequate ventilation.

Wash thoroughly after handling.

EMERGENCY/FIRST AID

If swallowed, induce vomiting immediately by giving two glasses of water and sticking finger down throat. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air.

If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush skin or eyes with plenty of water for at least 15 minutes. In all cases call a physician.

SEE SECTION 5.

DOT Hazard Class: Flammable Liquid

SECTION 1 Physical Data

Appearance: Clear, colorless liquid.

Odor: Alcohol.

Solubility: Miscible with water.

Boiling Point: Less than 100°C (212°F).

Melting Point: Less than 0°C (32°F).

Density: Less than 1

Vapor Density (Air=1): No information found.

Vapor Pressure (mm Hg): Like ethanol.

Evaporation Rate: No information found.

SECTION 2 Fire and Explosion Information

Fire:

Flammable. Flash point: 17°C (62°F) (ethyl alcohol major component)

Explosion:

Above the flash point, explosive vapor-air mixtures may be formed.

Fire Extinguishing Media:

Powder, alcohol-resistant foam, water spray or carbon dioxide.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

SECTION 3 Reactivity Data

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Carbon dioxide and carbon monoxide may form when heated to decomposition.

Hazardous Polymerization:

This substance does not polymerize.

Incompatibilities:

Oxidizing agents.

SECTION 4 Leak/Spill Disposal Information

Ventilate area of leak or spill. Remove all sources of ignition. Clean-up personnel require protective clothing and respiratory protection from vapors. Contain and recover liquid when possible. Collect as hazardous waste and atomize in a suitable RCRA approved combustion chamber, or absorb with vermiculite, dry sand, earth or similar material for disposal as hazardous waste in a RCRA approved facility.

Ensure compliance with local, state and federal regulations.

SECTION 5 Health Hazard Information

A. EXPOSURE / HEALTH EFFECTS

Inhalation:

May cause some irritation to the mucous membrane of the upper respiratory tract. Prolonged exposure can produce drowsiness and other symptoms, alcohol narcosis.

Ingestion:

May cause gastrointestinal upset from two components: the purgative effect of phenolphthalein and the poisonous character of the alcohol denaturants, methanol in particular. Neither produce immediate symptoms which is an added hazard. This is somewhat offset by the likelihood that fatalities would follow only very large ingestions.

Skin Contact:

Slight irritant and skin dessicant.

Eye Contact:

Irritant to eye tissues. May cause inflammation, tearing, pain and blurred vision.

Chronic Exposure:

Denaturants can cause kidney and liver damage. Methyl alcohol attacks the optic nerve.

Aggravation of Pre-existing Conditions:

Persons with pre-existing skin disorders or eye problems, or impaired liver, kidney or respiratory function may be more susceptible to the effects of the substance.

B. FIRST AID

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion:

If swallowed, induce vomiting immediately by giving two glasses of water, or milk if available and sticking finger down throat. Call a physician immediately. Never give anything by mouth to an unconscious person.

Skin Exposure:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Call a physician immediately.

Eye Exposure:

Wash eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

C. TOXICITY DATA (RTECS, 1982)

Oral rat LD50: 7060 mg/kg. (ethyl alcohol). Oral rat LD50: 5628 mg/kg (methyl alcohol). Mutation data cited. Reproductive effects data cited.

SECTION 6 Occupational Control Measures

Airborne Exposure Limits:

-OSHA Permissible Exposure Limit (PEL):

Ethyl alcohol: 1000 ppm (TWA)

Isopropyl alcohol: 400 ppm (TWA)

Methyl alcohol: 200 ppm (TWA)

-ACGIH Threshold Limit Value (TLV):

Ethyl alcohol: 1000 ppm (TWA)

Isopropyl alcohol: 400 ppm (TWA)

500 ppm (STEL)

Methyl alcohol: 200 ppm (TWA)

250 ppm (STEL) skin

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

Personal Respirators: (NIOSH Approved)

If the TLV is exceeded a full facepiece chemical cartridge respirator may be worn, in general, up to 100 times the TLV or the maximum use concentration specified by the respirator supplier, whichever is less. Alternatively, a supplied air full facepiece respirator or airtight hood may be worn.

Skin Protection:

Rubber or neoprene gloves and additional protection including impervious boots, apron, or coveralls, as needed in areas of unusual exposure.

Eye Protection:

Use chemical safety goggles. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work area.

SECTION 7 Storage and Special Information

Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from oxidizing materials. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Use non-sparking type tools and equipment.

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