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MATERIAL SAFETY DATA SHEET

MSDS No.: PP0180
Revision Date: February 26, 2010
Approved by: James A. Bertsch

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Section 1 Chemical Product and Company Information

Product	**PHENOL RED, 1% IN IPA/WATER** S933323
Synonyms	Phenol Red, pH Indicator

CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300

Section 2 Hazards Identification

Emergency Overview

WARNING! FLAMMABLE!
HARMFUL IF SWALLOWED, INHALED OR ABSORBED THORUGH SKIN.
CAUSES EYE IRRITATION.
Avoid contact with skin and eyes. Avoid repeated or prolonged inhalation of vapors. Use with adequate ventilation. Keep away from heat, sparks and open flame. Store in a cool place. Wash thoroughly after handling. Target organs: Central nervous system, liver, kidneys.

0 = Minimal
1 = Slight
2 = Moderate
3 = Serious
4 = Severe

Health	1
Fire	3
Reactivity	1
Contact	2

HMIS *

Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	TLV Units
Phenol red, sodium salt	34487-61-1	1%	None established.
Isopropyl alcohol	67-63-0	49.5%	TWA: 400 ppm; STEL: 500 ppm
Water	7732-18-5	49.5%	None established.
			(ACGIH 2001)

Section 4 First Aid Measures

INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN CONTACT: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

General information: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Fires involving a small amount of combustibles may be smothered by dry chemical. In fire conditions, water may evaporate from this solution which may cause hazardous decomposition products to be formed as dust or fume. Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heater, smoking, electric motors or ignition sources at locations distant from material handling point. CAUTION! Flame may not be visible in daylight.

Extinguishing Media: Carbon dioxide, dry chemical, water spray, alcohol foam.

Flash Point: 23.9°C (75.5°F) TCC (for 50% IPA)

Autoignition temperature: 399°C (750°F) ASTM-E659-78 (Pure IPA)

Explosion Limits: Lower: 2% **Upper:** 12% (Pure IPA)

NFPA

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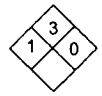

Section 6 Accidental Release Measures

Use proper personal protective equipment as indicated in Section 8. Remove all sources of ignition. Provide adequate ventilation. Recover for use if not contaminated. Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water. Avoid runoff into storm sewers and ditches which lead to waterways.

(2008 EMERGENCY RESPONSE GUIDEBOOK, (PHH50-ERG2008), GUIDE NO. 127)

Section 7 Handling & Storage — FLAMMABLE STORAGE CODE RED

Read label on container before using. Do not wear contact lenses when working with chemicals. Keep container tightly closed. For laboratory use only. Not for drug, food or household use. Keep out of reach of children.
Handling: Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid ingestion. Do not inhale vapors, spray or mist. Wash thoroughly after handling. Remove and wash clothing before reuse.
Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources.

Section 8 Exposure Controls / Personal Protection

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: Use a chemical fume hood and/or wear a NIOSH/MSHA-approved respirator.

Section 9 Physical & Chemical Properties

Physical state: Liquid.
Appearance: Reddish-orange.
Odor: Aromatic odor.
pH: N/A
Vapor pressure (mm Hg): 33 mm @ 20°C (Pure IPA)
Vapor Density (Air = 1): 2.1 (Pure IPA)
Evaporation rate (Butyl acetate = 1): > 1
Viscosity: N/A

Boiling point: 80°C (176°F) (50% IPA)
Freezing / Melting point: ~ -21.6°C (-7°F)(50% IPA)
Decomposition temperature: N/A
Solubility: Complete.
Specific gravity (H_2O = 1): 0.8 (50% IPA)
Percent volatile (%): 100%
Molecular formula: Mixture.
Molecular weight: Mixture.

Section 10 Stability & Reactivity

Chemical stability: Stable
Hazardous polymerization: Will not occur.
Conditions to avoid: Excessive temperatures, heat, sparks, open flame and other sources of ignition.

Incompatibilities with other materials: Strong oxidizing materials, caustics, aluminums, metals, nitroform, oleum, chlorinated compounds can react vigorously with this alcohol.

Hazardous decomposition products: Oxides of carbon.

Section 11 Toxicological Information

Effects of overexposure: INGESTION: 100 ml can be fatal. Aspiration hazard. EYES: Liquid may cause irritation. SKIN: Prolonged or repeated contact may cause irritation and drying, cracking and defatting of the skin. INHALATION: Exposure to high concentrations (>400 ppm) may cause eyes, nose and throat irritation and excessively high concentrations may cause narcosis (drowsiness, sleepiness). Target organs: Central nervous system, liver, kidneys.

ORL-HMN LDLo: 2371 mg/kg (IPA)
ORL-RAT LD50: 5045 mg/kg (IPA)
IHL-RAT LC50: N/A
SKN-RBT LD50: 12800 g/kg (IPA)

Section 12 Ecological Information

Data not yet available.

Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information

UN/NA number: UN1987
Shipping name: Alcohols, n.o.s., (Isopropanol)
Hazard class: 3
Packing group: III
Exceptions: Ltd Qty ≤ 5 Lt.

Section 15 Regulatory Information

Isopropyl alcohol: TSCA-listed, EINECS-listed (200-661-7), RCRA code D001

Section 16 Additional Information