PHENOLPHTHALEIN SOLUTION 1%

************MATERIAL SAFETY DATA SHEET************

Phenolphthalein Solution 1% 45376

SECTION 1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: Phenolphthalein Solution 1%

Catalog Numbers: S71429, S71976, S76970, SP62 1, SP62 500, SP621, SP62500

Synonyms: Phenolphthalein Indicator Solution

Company Identification: Fisher Scientific 1 Reagent Lane Fairlawn, NJ 07410 For Information call: 201-796-7100 EMERGENCY NUMBER: 201-796-7100 For CHEMTREC assistance, call: 800-424-9300

*** Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS***

CAS #	CHEMICAL NAME	%	EINECS#
67-63-0	Isopropyl Alcohol	99	unlisted
77-09-8	Phenophthalein	1.0	unlisted

*** Section 3 - HAZARDS IDENTIFICATION***

EMERGENCY OVERVIEW

Appearance: Colorless Liquid. Flash Point 55 dg. F WARNING! COMBUSTIBLE LIQUID. CAUSES RESPIRATORY TRACT IRRITATION. MAY CAUSE SKIN IRRITATION. CAUSES EYE IRRITATION. MAY CAUSE EYE IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. MAY CAUSE DIGESTIVE TRACT IRRITATION. MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION. MAY BE ABSORBED THROUGH THE SKIN. MAY CAUSE KIDNEY DAMAGE. Target organs: Kidneys, Central Nervous System, None.

POTENTIAL HEALTH EFFECTS:

EYE:

May cause eye irritation. Produces irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury.

SKIN:

May cause skin irritation. Prolonged and/or repeated contact may cause defatting of skin and dermatitis. May cause irritation with pain and stinging, especially if the skin is abraded.

INGESTION:

May cause irritation of the digestive tract. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause kidney damage. May cause Central Nervous System depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. Expected to be a low ingestion hazard.

INHALATION:

Inhalation of high concentrations may cause Central Nervous System effects characterized by headache, dizziness, unconsciousness and coma. May cause respiratory tract irritation. Inhalation of vapor may cause respiratory tract irritation. Low hazard for usual industrial handling.

CHRONIC:

Prolonged or repeated skin contact may cause defatting and dermatitis. May cause allergic skin reaction in some individuals.

*** SECTION 4 - FIRST AID***

EYES:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Get medical aid. Get medical aid immediately.

SKIN:

Get medical aid. 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. Flush skin with plenty of soap and water.

INGESTION:

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately. Get medical aid if irritation or symptoms occur.

INHALATION:

Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

NOTES TO PHYSICIAN:

Treat symptomatically and supportively.

SECTION 5 - FIRE FIGHTING MEASURES

GENERAL INFORMATION:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH

(approved or equivalent), and full protective gear. Vapors can travel to a source of ignition and flash back. Use water spray to keep fire-exposed containers cool. Containers may explode

in the heat of a fire. This chemical poses an explosion hazard.

EXTINGUISHING MEDIA:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For small fires, use water spray, dry chemical, carbon dioxide or chemical foam. Use water spray to cool fire-exposed containers. Water may be ineffective. AUTOIGNITION TEMPERATURE: 750 dg. F (398.89 dg. C) FLASH POINT: 55 dg. F (12.78 dg. C) NFPA RATING: Not published. EXPLOSION LIMITS, LOWER: 2.0 UPPER: 12.7 @ 200

SECTION 6 - ACCIDENTAL RELEASE MEASURES

GENERAL INFORMATION: Use proper personal protective equipment as indicated In Section 8.

SPILLS/LEAKS:

Absorb spill with inert material, (e.g., dry sand or earth), then place into a chemical waste container for disposal. Remove all sources of ignition.

SECTION 7 - HANDLING AND STORAGE

HANDLING:

Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, sparks or open flames. Keep container tightly closed. Avoid ingestion and inhalation.

STORAGE:

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Keep container closed when not in use. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances.

SECTION 8 - EXPOSURE

ENGINEERING CONTROLS:

Good general ventilation should be sufficient to control airborne levels. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible limits.

EXPOSURE LIMITS:

Chemical NameACGIH/NIOSHOSHAFinal PEL'sIsopropyl Alcohol400 ppm ; 983400 ppm TWA; 980400 ppm TWA;980Mg/m3; 500I mg/m3 TWA; 500 I mg/m3 TWA I STEL; 1230 mg/m3 Ippm STEL; 1225 I ISTEL I mg/m3 STEL I I

Phenolphthalein None listed None listed None listed **OSHA Vacated PEL's:**

ISOPROPYL ALCOHOL: 400 ppm TWA; 980 mg/m3 TWA; 500 ppm STEL; 1225 mg/m3 STEL

PHENOLPHTHALEIN: No OSHA VACATED PEL's listed for this chemical.

PERSONAL PROTECTIVE EQUIPMENT:

EYES:

Wear safety glasses and chemical goggles if splashing is possible. Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.

SKIN:

Wear appropriate protective clothing to minimize contact with skin. Wear appropriate protective clothing to prevent skin exposure.

RESPIRATORS:

A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. Follow the OSHA respirator regulations found in 29CFR 1010.134. Always use a NIOSH-approved respirator when necessary.

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

Physical State: Liquid Appearance: Colorless liquid Odor: Alcohol-like odor pH : not available Vapor Pressure: 40 mm Hg Vapor Density: 2.1 Evaporation Rate: 2.88 (Butyl Acetate = 1) Viscosity: Not available Boiling Point: 83 dg C Freezing Melting Point: -89 dg. C Decomposition Temperature: Not Available Solubility: Soluble in water. Specific Gravity/Density: 0.7855 Molecular Formula: Mixture Molecular Weight: Not available.

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability: Stable. Conditions to avoid: STABLE: incompatible materials, ignition sources, excess heat. Incompatibilities with Other Materials: Strong Oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, acrid smoke and fumes. Hazardous Polymerization: Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 67-63-0: NT8050000 CAS# 77-09-8: SM8380000 LD50/LC50: Not available/Not available

Carcinogenicity:

Isopropyl Alcohol-

ACGIH: Suspected human carcinogen California: carcinogen NIOSH: occupational carcinogen NTP: Suspect carcinogen OSHA: Possible Select carcinogen. IARC: Group 3 carcinogen.

Phenolphthalein:

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology: No data available. Teratogenicity: No data available. Reproductive Effects: No data available. Neurotoxicity: No data available. Mutagenicity: No data available. Other Studies: No data available.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: Not available Environmental Fate: Not available Physical/Chemical: Not available Other: Not available

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations. RCRA D-Series Maximum Concentration of Contaminates: Not Listed RCRA D-Series Chronic Toxicity Reference Levels: Not listed RCRA F-Series: Not listed RCRA U-Series: Not listed Not listed as a material banned from land disposal according to RCRA.

SECTION 14 - TRANSPORTATION INFORMATION

US DOT

Shipping Name: **NOT HAZARDOUS PER 49 CFR 173.4*** Hazard Class: 110 UN Number: UN0001 Packing Group: IMO: No information available. IATA: No information available. RID/ADR: No information available.

CANADIAN TDG:

Shipping Name: FLAMMABLE LIQUID NOS (2-PROPANOL) Hazard Class: 3 UN Number: UN1993 Other Information: FLASHPOINT 12C

SECTION 15 - REGULATORY CONTROLS

A. Federal

TSCA CAS# 67-63-0 is listed on the TSCA inventory. CAS# 77-09-8 is listed on the TSCA inventory.

HEALTH AND SAFETY REPORTING LIST CAS# 67-63-0: Effective Date: December 15, 1986

Chemical Test Rules CAS# 67-63-0: Testing required by: manufacturers; importers; processor Section 12b CAS# 67-63-0: export notification required - Section 4

TSCA SIGNIFICANT NEW USE RULE:

None of the chemicals in this material have a SNUR under TSCA.

CERCLA/SARA:

Section 302 (RQ): None of the chemicals in this material have an RQ Section 302 (TPQ): None of the chemicals in this product have a TPQ. SARA CODES: CAS# 67-63-0: Acute, chronic, flammable. CAS# 77-09-8: Acute

SECTION 313:

This chemical is not at high enough concentration to be reportable under 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.

OSHA:

None of the chemicals in this product are considered as highly hazardous by OSHA.

B. State

Isopropyl Alcohol can be found on the following State right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

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.

C. International

Canada CAS# 67-63-0 is listed on Canada's DSL/NDSL List. CAS# 77-09-8 is listed on Canada's DSL/NDSL List. CAS# 67-63-0 is listed on Canada's Ingredient Disclosure List. CAS# 77-09-8 is not listed on Canada's Ingredient Disclosure List. European Labeling in Accordance with EC Directives. Hazard Symbols: Not available. Risk Phrases: Safety Phrases: Exposure Limits: OEL-AUSTRALIA: TWA 400 ppm (980 mg/m3); STEL 500 ppm (1225 mg/m3). OEL-BELGIUM: TWA 400 ppm (985 mg/m3); STEL 500 ppm (1230 mg/m3) OEL-DENMARK: TWA 200 ppm (490 mg/m3); Skin. OEL-FRANCE: STEL 400 ppm (980 mg/m3) OEL-GERMANY: TWA 400 ppm (980 mg/m3) OEL-JAPAN: STEL 400 ppm (980 mg/m3) OEL-NETHERLANDS: TWA 400 ppm (980 mg/m3);Skin OEL-THE PHILLIPINES: TWA 400 ppm (980 mg/m3) OEL-RUSSIA: STEL 400 ppm (10 mg/m3) OEL-SWEDEN: TWA 150 ppm (350 mg/m3);STEL 250 ppm (600 mg/m3) OEL-SWITZERLAND: TWA 400 ppm (980 mg/m3);STEL 800 ppm. OEL-TURKEY: TWA 200 ppm (500 mg/m3) OEL-UNITED KINGDOM: TWA 400 ppm (980 mg/m3); STEL 500 ppm; Skin.

OEL in NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV.

SECTION 16 - ADDITIONAL INFORMATION

Additional Information:

MSDS Creation Date: 10/04/1995 Revision Date: 03/04/1996

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from it's use. User's should make their own investigations to determine the suitability of the information for their particular purpose. In no way shall Fisher be liable for any claims, losses, or damages of nay third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, however so arising, even Fisher has been advised of the possibility of such damages.