WARNING! Detectable amounts of chemicals known to the State of California to cause cancer, birth defects or other reproductive harm are present in this product.

Material Safety Data Sheet

Revised: 06/01/2010 Similar to Form OSHA-20

BN8306

Manufacturer: Biopharm Inc. · · · Telephone Number: 870) 389-6114 Address: 187 South Tilley Road · Hatfield, AR 71945

Chemtrec · 24-hr Emergency Phone · (800) 424-9300

Section I: Product Identification:

Chemical Name and Synonyms: Not Applicable

Trade Name and Synonyms: Neutralizing Solution - T.D.S.

Chemical Family: Not Applicable Formula: Not Applicable

Section II: Ingredients

CHEMICAL NAME	CAS Number
Deionized Water	7732-18-5
Isopropanol	67-63-0
Phenolphthalein	77-09-8
Citric Acid	5949-29-1

Section III: Physical Data

Boiling Point (°F): No Data

Vapor Pressure (mm Hg): No Data

Percent Volatile by Volume: No Data

Evaporative Rate $(H_2O = 1)$: No Data

Vapor Density (Air = 1): No Data

Solubility in Water: Infinite

Specific Gravity $(H_2O = 1)$: Approx. 1

Appearance and Odor: Clear, colorless, solution with slight aromatic odor.

Section IV: Fire and Explosion Hazard Data

Flash Point (Method used): 62°F (Closed cup method)

Explosive Limits: Lel: No Data Uel: No Data

Extinguishing Media: Alcohol foam, carbon dioxide, or dry chemical.

Special Fire Fighting Procedures: Wear self-contained breathing apparatus and full protective

clothing.

Unusual Fire and Explosion May decompose to form carbon dioxide or carbon monoxide.

Hazards: Avoid using heat or flame near product. Vapors may be heavier

than air, and may move by ventilation to distant sources of heat

and flame, i.e., pilot lights, heaters, electric motors, etc.

Airborne Exposure Limits:

WATER:

ACGIH Threshold Limit Value (TLV): None established

OSHA Permissible Exposure Limit (PEL): None established

ISOPROPANOL:

ACGIH Threshold Limit Value (TLV): 492 mg/m³ (TWA); 984 mg/m³ (STEL/CEILING)

OSHA Permissible Exposure Limit (PEL): 980 mg/m³ (TWA)

PHENOLPHTHALEIN:

ACGIH Threshold Limit Value (TLV): None established

OSHA Permissible Exposure Limit (PEL): None established

CITRIC ACID:

ACGIH Threshold Limit Value (TLV): None established

OSHA Permissible Exposure Limit (PEL): None established

Toxicity:

ISOPROPANOL:

Oral rat LD₅₀: 5045 mg/kg; oral mouse LD₅₀: 3600 mg/kg; LC₅₀: No data

PHENOLPHTHALEIN:

LD₅₀: No data; LC₅₀: No data

CITRIC ACID:

Oral rat LD₅₀: 6730 mg/kg; LC₅₀: No data

NFPA Codes: Health: 2

Flammability: 3

Reactivity: 0

Target Organs:

Central nervous system, kidneys and liver.

Carcinogenic Effects:

WATER:

Not listed as a carcinogen or suspected carcinogen by IARC, NTP, or OSHA.

ISOPROPANOL:

IARC - Unclassifiable as to carcinogencity in humans.

TLV - Not classifiable as a human carcinogen.

PHENOLPHTHALEIN:

NTP – Known to be a human carcinogen.

IARC - Possibly carcinogenic to humans.

CITRIC ACID:

Not listed as a carcinogen or suspected carcinogen by IARC, NTP, or OSHA.

Mutagenic Effects:

Mutation references cited (RTECS, 1982) [Isopropanol]

Mutagenic for mammalian somatic cells. [Phenolphthalein, powder]

Teratogenic Effects: No data

Developmental Toxicity:

ISOPROPYL ALCOHOL:

This material, or a component, has been shown to cause harm to the fetus in studies of laboratory animals. Such harm occurs at levels that are also harmful to the pregnant animal. The relevance of these studies to humans is not known.

INHALATION: Inhalation of vapor or mist may cause impaired coordination, respiratory tract irritation, coughing, and breathing difficulty. Depression of the central nervous system may occur, including dizziness, drowsiness, weakness, fatigue, nausea, headache, and eventually coma and death. May result

pain and burns of the mucous membranes of the nose, mouth, and throat.

SKIN CONTACT: May cause irritation, redness, pain, and possibly burns. Repeated or prolonged exposure may result in contact dermatitis or severe burns.

EYE CONTACT: May cause redness, irritation, swelling, pain, and possibly burns. Chronic exposure may result in conjunctivitis or eye damage.

INGESTION: May cause gastrointestinal irritation and abdominal pain, nausea, vomiting, and diarrhea. May result in burns of the mucous membranes and associated pain. May affect speaking and/or ability to breathe. No data is available regarding chronic exposure.

Chronic Effect: While there is no data on chronic exposure to this product, there exists documentation of overexposure to the component isopropanol. Isopropanol has been found to cause harm to the fetus in animal studies. Also, mild, reversible liver effects have been seen in laboratory animals. Direct relevance of these studies to humans is uncertain.

Emergency and First Aid Procedures:

INHALATION: Remove from exposure area to fresh air immediately. If breathing has stopped, give artificial respiration. Maintain airway and blood pressure and administer oxygen, if available, given by qualified personnel.

SKIN CONTACT: Immediately wash with large amounts of water for at least 15 minutes. Remove contaminated clothing and footwear.

EYE CONTACT: Wash eyes immediately with large amounts of water, occasionally lifting upper and lower lids, until no evidence of chemical remains, at least 15 to 20 minutes. Continue irrigating with normal saline until pH returns to neutral.

OBTAIN MEDICAL ATTENTION!

INGESTION: NEVER give anything by mouth to an unconscious person. Give large quantities of water. Keep airways clear and induce vomiting. SEEK MEDICAL ATTENTION IMMEDIATELY. Medical Conditions Aggravated by Exposure: Persons susceptible to eye problems, skin disorders, impaired liver, kidney or respiratory function, and/or gastrointestinal or nervous system problems may be at increased risk to symptomatic effects of overexposure.

Section VI: Reactivity Data

Stability: Stable under normal conditions

Conditions to Avoid: Excessive heat or flame

Incompatibility (Materials to Avoid): May react with aluminum, tin, zinc, leather,

wood, strong oxidizing agents, chlorine, ethylene

oxide, and isocyanates

No information found. Hazardous Decomposition Products:

> Hazardous Polymerization: Will not occur.

Section VII: Spill or Leak Procedures

Steps to be taken in case of Ventilate area and remove all sources of ignition. Wear protective

clothing and equipment as indicated in Section IV. Use an absorbent release or spill: material such as sand, sawdust, or vermiculite to absorb small spills or

any leakage that cannot be recovered for recycling. DO NOT USE EQUIPMENT THAT MAY GENERATE HEAT OR SPARKS to recover spills. Wash area thoroughly with water after recovering

released material.

To be performed in compliance with all current local, state and federal *Waste Disposal Method:*

> regulations. Spills onto sand, soil, or other absorbent may be handled by placing the affected soil into approved containers then label and store

for proper treatment or disposal.

Section VIII: Special Protection Information

Respiratory Protection: Under normal conditions, respiratory protection is not required. Use

> NIOSH/MSHA approved respirators where spray, mist, or dust may be generated or over-exposure to any of the individual components of the

solution may occur.

Ventilation: Well-ventilated area or chemical fume hood.

Protective Gloves: Use chemical resistant gloves. Eve Protection: Wear chemical safety glasses.

Other Protective Equipment: Laboratory clothing, eye bath and safety shower.

Section IX: Special Precautions

Storage and Handling: Refer to Sections IV, VI, and VIII. Store tightly capped in a cool

place, maintained in an upright position.

Other Precautions: Do not take internally. This product is for industrial use only.

DOT: FLAMMABLE LIQUID, N.O.S. (Isopropanol Solution); 3,

UN1993, PGII; Flammable liquid Limited Quantity - One liter or less

The statements contained herein are offered as informational data only and are believed to be correct. However, this product should be handled by persons having related technical skills, and at their own discretion and risk. Since seller has no control over the use of this product, no warranty, expressed or implied, is made and seller assumes no liability in connection with any use of this information or from contact and/or handling of this product.