PreservCyt® Solution

PRODUCT IDENTIFICATION

Synonyms: Cell preservative solution
Formula CAS No.: N/A
Molecular Weight: N/A
Chemical Formula: N/A
Hazardous Ingredients: Methyl Alcohol

PRECAUTIONARY MEASURES

DANGER: MAY BE FATAL IF SWALLOWED. HARMFUL IF INHALED. VAPOR HARMFUL. FLAMMABLE! MAY CAUSE BLINDNESS. CANNOT BE MADE NON-POISONOUS. CAUSES IRRITATION.

Keep away from heat, sparks, and flame.
Avoid breathing vapor.
Keep container closed.
Use with adequate ventilation.
Wash thoroughly after handling.

EMERGENCY/FIRST AID

In all cases, call a physician immediately. 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.

SEE SECTION 5: Health Hazard Information

SECTION 1: Physical Data

Appearance: Clear, colorless liquid
Odor: Characteristic odor
Solubility: Miscible with water
Boiling Point: 64.5°C (148°F)
Melting Point: -98°C (-147°F)
Specific Gravity: 0.93
Vapor Density: 1.1
Vapor Pressure: (mm Hg): 97@ 20°C (68°F)
Evaporation Rate: (BkAc=1): 5.9

SECTION 2: Fire and Explosion Information

Fire:
Flammable: Yes
Flashpoint: 28°C (83°F) (CC)
Autoignition Temperature: 385°C (725°F)
Flammable limits, in air, % by volume: LEL = 6.7; UEL = 36

Explosion:
Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Moderate explosion hazard and dangerous fire hazard when exposed to heat, sparks, or flames.

Fire Extinguishing Media:
Water spray, dry chemical, alcohol foam, 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. Use water spray to blanket fire, cool fire exposed containers, and to flush unignited spills or vapors away from fire. Vapors can flow along surfaces to distant ignition source and flash back.

SECTION 3: Reactivity Data

Stability:
Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:
Carbon oxides and formaldehyde may form when heated to decomposition.

Hazardous Polymerization:
This substance does not polymerize.

Incompatibilities:
Strong oxidizing agents such as nitrates, perchlorates, or sulfuric acid will attack some forms of plastics, rubber, and coatings. May react with metallic aluminum and generate hydrogen gas.

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 of hazardous waste at an RCRA approved facility. Do not flush to sewer.

Reportable Quantity (RQ)(CWA/CERCLA): 5000 lb.

Ensure compliance with local, state and federal regulations.

NFPA RATINGS: Health 1 – Flammability 3 – Reactivity 0

PreservCyt® Solution
SECTION 5: Health Hazard Information

A. Exposure/Health Effects

Inhalation:
A slight irritant to the mucous membranes. Toxic effects exerted upon nervous system, particularly the optic nerve. Once absorbed into the body, it is very slowly eliminated. Symptoms of overexposure may include headache, drowsiness, nausea, vomiting, blurred vision, blindness, coma and death. A person may get better, but then worse again up to 30 hours later.

Ingestion:

Skin Contact:
Methyl alcohol is a defatting agent and may cause skin to become dry and cracked. Skin absorption can occur. Symptoms may parallel inhalation exposure.

Eye Contact:
Irritant. Continued exposure may cause eye lesions.

Chronic Exposure:
Marked impairment of vision and enlargement of the liver has been reported. Repeated or prolonged exposure may cause skin irritation.

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

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 and sticking finger down throat. Never give anything by mouth to an unconscious person. Call physician immediately.

Skin Exposure:
Remove any contaminated clothing. Wash skin with soap or mild detergent and water for at least 15 minutes. Get medical attention if irritation develops or persists.

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

B. First Aid

C. Toxicity Data (RTECS, 1986)
Oral rat LD50: 5628 mg/kg. Skin rabbit: 20 gm/kg. Aquatic toxicity rating TLM: over 1,000. Mammalian data cited. Reproductive effects data cited.

SECTION 6: Occupational Control Measures

Airborne Exposure Limits:
- OSHA Permissible Exposure Limit (PEL): 220 ppm (TWA), 250 ppm (STEL) skin
- ACGIH Threshold Limit Value (TLV): 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 into the general work area. Please refer to the ACGIH document, “Industrial Ventilation: A Manual of Recommended Practices,” most recent edition, for details.

SECTION 7: Storage and Special Information

Protect against physical damage. Outside or detached storage is preferred. Separate from oxidizing materials. Store in original D.O.T. containers. Storage and usage areas should be NO SMOKING areas. Spark-proof tools and explosion-proof equipment should be used in the storage and handling area.

Personal Respirators: (NIOSH Approved)
If the TLV is exceeded, wear a supplied air, full-facepiece respirator, airlined hood, or self-contained breathing apparatus.

Skin Protection:
Rubber or neoprene gloves and additional protection including impervious boots, apron, or coveralls, as needed is 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.

PreservCyt® Solution Material Safety Data Sheet

PreservCyt® Solution