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Section I - Product Identification

Product: A solution of reagent alcohol, mercuric chloride, polyvinyl alcohol, acetic acid and glycerine in water.

Intended Uses: An in-vitro diagnostic reagent intended to be used as a fixative for parasites in stool.

Uses advised against: Intended for laboratory use only.

Manufacturer Identification

Medical Chemical Corp.
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Emergency Telephone Number

CHEMTREC Emergency Response Telephone Number: (800)424-9300. Note: The CHEMTREC phone number is only for emergencies involving spills, leaks, fire, exposure or accident. Please direct all other inquiries to our customer service phone number.

Section II - Hazard Identification

This item is considered hazardous by 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquid: Category 3 (H226). Highly flammable liquid and vapor.

Eye damage/eye irritation: Category 2 (H314) Causes severe skin burns and eye damage.

Acute toxicity (Oral): Category 1 (H300). Fatal if swallowed.

Acute toxicity (Inhalation): Category 4 (H332). Harmful if inhaled.

Acute toxicity (Dermal): Category 2 (H314). Causes severe skin burns and eye damage.

Specific organ toxicity (Repeated Exposure): Category 1 (H372). Causes damage to organs.

Germ cell Mutagenicity: Category 2 (H341). Suspected of causing genetic defects.

Reproductive toxicity: Category 2 (H361F). Suspected of damaging fertility.

Signal word: Danger

Hazard statements

According to the harmonized classification and labeling required by OSHA and the EU, this substance is a highly flammable liquid and vapor, causes serious eye irritation and may cause drowsiness or dizziness. In case of skin contact immediately remove all contaminated clothing. Rinse with water or shower. In case of fire, use fire extinguishers approved for alcohol fires. Fatal if swallowed. Wash thoroughly after handling. Do not eat drink or smoke while using this product. If swallowed rinse mouth with water and immediately call a poison control center. Administer antidote for mercury poisoning if available. Mercury salts are extremely toxic. Mercuric chloride is an experimental teratogen and mutagen.

Precautionary statements

P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P242 Use only non-sparking tools.
P243 Take precautions against static discharge.
P264 Wash thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective clothes and eye protection.

Safety Ratings

Health: Extremely hazardous *Flammability:* Highly Flammable *Reactivity:* Unstable if heated *Contact:* Hazardous

Recommended safety equipment: safety goggles, lab coat and proper gloves

NFPA Ratings

Health = 3 Flammability = 3 Reactivity = 1

Potential Health Effects

The toxicology of this compound has not been completely examined. Inhalation or contact with ethanol may irritate or burn skin and eyes. Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizzi-

ness or suffocation. Exposure to methanol vapor causes eye irritation, headache, fatigue and drowsiness. High concentrations can produce central nervous system depression and optic nerve damage. Can be absorbed through skin. Swallowing methanol may cause death or eye damage. Because of the genetic toxicity of mercury compounds, Pregnant women should be particularly vigilant when handling this item. Signs of overexposure include increased salivation, foul breath, abdominal pain, bloody diarrhea and inflammation and/or ulceration of the mucous membranes.

Inhalation: Alcohols are absorbed through the mucous membranes and will produce irritation as well as the same effects as ingestion.

Ingestion: Ingestion will produce CNS disturbance, dizziness, photophobia, headache, stupor, coma and death. Mercuric chloride is a highly toxic cumulative poison and extremely corrosive

Skin contact: Alcohols are absorbed through the skin. Repeated contact causes defatting of the skin with resultant irritation and flaking. Skin contact may result in burns and/or dermatitis. Repeated contact with mercuric chloride can cause systemic poisoning.

Eye contact: Irritating and corrosive. Even brief contact can cause irreversible eye damage

Chronic Exposure: Mercuric compounds are a cumulative poison..

Aggravation of preexisting conditions: Impaired kidney and liver function may be aggravated by exposure to alcohols. Preexisting eye, skin, and respiratory conditions may also be aggravated. Methanol has shown genetic toxicity in some animals.

Section III - Composition/Information on Components

Ingredient	CAS #	EC/List No.	%
Ethanol	64-17-5	200-662-2	15 - 30% w/w
Acetic Acid	64-19-7	616-485-2	2 - 8% w/w
Polyvinyl Alcohol	557-75-5	618-340-9	3 -5% w/w
Mercuric chloride	7487-94-7	231-299-8	4 - 5% w/w
Glycerine	59-81-5	200-289-5	1 - 3% w/w
Isopropanol	67-63-0	200-661-7	1 - 2% w/w
Methanol	67-56-1	200-659-6	1 - 2% w/w

Section IV - First Aid Measures

General Advice: Get immediate medical attention..

Inhalation: Remove from source of exposure and get medical attention for any breathing difficulty.

Ingestion: Rinse mouth with water but do not induce vomiting. Aspiration of into the lungs may prove fatal. If the patient is conscious administer water or milk to dilute the poison and an absorbent such as activated charcoal. Specific antidotes for mercury poisoning are also available. Get immediate medical attention even if symptoms improve.

Skin Contact: In case of skin contact, remove contaminated clothing and flush with water. Wash affected area with soap and water. Launder clothing before reuse. Get medical advice.

Eye Contact: Remove contact lenses if feasible and flush with water for at least 15 minutes. Get medical attention.

Section V - Fire Fighting Measures

Fire Extinguishing Media: Alcohol foam, carbon dioxide or dry chemical. Water is ineffective against alcohol fires but may be used to cool adjacent containers.

Flash point: 29 °C (84 °F) TCC

Flammable Limits (for ethanol): LEL 3% UEL 19%

Flammable Limits (for methanol): LEL 6% UEL 36.5%

Flammable Limits (for isopropanol): LEL 2% UEL 12%

Specific Hazards: Risk of vapor traveling to source of ignition and flashing back. Risk of exploding containers when heated. Vapor in air may form explosion risk.

Special information: Pyrolysis will release toxic carbon monoxide, formaldehyde, methanol and mercury.

Special protective gear and precautions: Self contained breathing apparatus and protective gear recommended.

Section VI - Accidental Release Measures

Use personal protective gear, remove all sources of ignition, absorb with a suitable absorbent and dispose at a licensed disposal site. Take precautions against static ignition. Should not be released into the environment.

Section VII - Handling and Storage

P403+P233+P102+P405; Store in a well-ventilated place. Keep container tightly closed. Store away from open flames or other sources of ignition. Keep out of reach of children. Store locked up.

Section VIII - Exposure Control/Personal Protection

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethanol	1000 ppm	1000 ppm	3300 ppm
Mercuric Chloride	0.025 mg/m ³ TWA	0.025 mg/m ³ TWA	10 mg/m ³ Hg
Acetic Acid	25 mg/m ³ (TWA)	25 mg/m ³ (TWA)	50 ppm
Polyvinyl Alcohol	NA	NA	NA
Glycerine	10 mg/m ³	10 mg/m ³	Not Applicable
Isopropanol	400 ppm	400 ppm	2000 ppm
Methanol	200 ppm (skin)	200 ppm (skin)	6000 ppm

Legend

ACGIH: American Conference of Governmental Industrial Hygienists.

OSHA: Occupational Safety and Health Administration.

NIOSH: National Institute for Occupational Safety and Health.

IDLH: Immediately dangerous to life or health.

Ventilation System: Local exhaust such as explosion proof chemical fume hoods are recommended. When required, Refer to the ACGIH document, "Industrial Ventilation, a Manual of Recommended Practices" for details about ventilation.

Personal Respirator: Usually not required. In case of emergency, or when exposure levels are unknown, use a positive pressure, full face piece, air supplied respirator.

Skin protection: Protective gloves are required.

Eye Protection: Laboratory safety goggles or similar products are required.

Section IX - Physical and Chemical Properties

Boiling Point: 88 °C (190 °F)

Density: 0.99 g/ml

Vapor pressure (mm Hg @ 25 °C): Unknown

Evaporation Rate (Water = 1): 1

Vapor Density (air = 1): 1.6

Solubility: Infinitely miscible with water

Appearance and Odor: A clear colorless liquid with a sweet odor. Has the characteristic odor of alcohol.

Section X - Stability and Reactivity

Stability: Stable under normal conditions.

Hazardous Decomposition Products: Does not decompose when used for intended use.

Hazardous polymerization: Will not occur.

Incompatibilities: Oxidizers.

Conditions to avoid: heat, flame and sources of ignition.

Section XI - Toxicological Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethanol	1047 mg/kg (Rat)	20 ml/kg (Rat)	125 mg/l/4h (Rat)
Mercuric Chloride	41 mg/kg (Rat)	Very hazardous	No Data
Polyvinyl Alcohol	No Data	No Data	No Data
Acetic Acid	3310 mg/kg (Rat)	No Data	2810 ppm/4 h (Mouse)
Glycerine	12600 mg/kg (Rat)	10000 mg/kg (Rabbit)	>570 mg/m ³ h (Rat)
Isopropanol	>4700 mg/kg (Rat)	13,000 mg/kg (Rabbit)	19,000 ppm/8h (Rat)
Methanol	5628 mg/kg (Rat)	15,800 mg/kg (Rabbit)	64,000 ppm/4h (Rat)

Cancer lists

<i>Ingredient</i>	<i>Known Carcinogenicity?</i>	<i>NTP?</i>	<i>Anticipated?</i>	<i>IARC Category</i>
Ethanol	No	No	No	None
Mercuric chloride	No	No	No	3
Acetic Acid	No	No	No	None
Glycerine	No	No	No	None
Methanol	No	No	No	None
Isopropanol	No	No	No	3

Section XII - Ecological Information

The half-life for ethanol in the atmosphere is one to ten days. Mercuric compounds are an environmental hazard.

Environmental Fate: Mercury salts bioaccumulate.

Soil Mobility: Unknown

Environmental Toxicity: (H410) Hazardous to the aquatic environment, long-term hazard

Component	Freshwater Fish	Water Flea	Freshwater algae
Ethanol	LC50 100 mg/l 96 h	LC50 = 100 mg/L 48 h	LC50 = 100 mg/l 72 h
Mercuric Chloride	LC50 0.11 mg/l 96 h	LC 50 0.002 mg/l 48 h	LC 50 0.002 mg/l 48 h
Glycerine	LC50 58.5 ppm 96 h	No Data	No Data
Acetic Acid	LC50 88 ppm 96 h	>100 ppm 96 h	No Data
Methanol	LC50 >100 mg/l 96 h	LC50 >1000 mg/l 48 h	LC50 > 22 g/l 96 h
Isopropanol	LC50 > 9640 mg/l 96 h	LC50 >7550 mg/l 48 h	LC50 >1000 mg/l 72 h

Section XIII - Disposal Considerations

Disposal at a licensed chemical disposal facility is the preferred disposal method. Local governments usually forbid drain disposal of mercury compounds. Dispose of contents and container in accord with all applicable regulations.

Section XIV - Transportation Information

DOT Shipping name: Flammable Liquid, Toxic, N.O.S. (Mercuric Chloride) Hazard Class: 3, 6.1
Packaging Group II Hazard Label: Flammable liquid, Poison UN Identification Number: UN1992

Section XV - Regulatory Information

Chemical Inventory Status


<i>Ingredient</i>	<i>TSCA</i>	<i>EC</i>
Ethanol	Yes	Yes
Mercuric Chloride	Yes	Yes
Glycerine	Yes	Yes
Acetic Acid	Yes	Yes
Methanol	Yes	Yes
Isopropanol	Yes	Yes

Federal and State Regulations

<i>Ingredient</i>	<i>SARA 302</i>		<i>SARA 313</i>		<i>RCRA</i>	<i>TSCA</i>	
	<i>RQ</i>	<i>TPQ</i>	<i>List</i>	<i>Category</i>	<i>261.33 8(D)</i>	<i>Ca. Prop 65</i>	
Ethanol	No	No	No	No	No	No	No
Mercuric chloride	500	500	No	Mercury Cmpd	No	No	Yes
Glycerine	No	No	No	No	No	No	No
Acetic Acid	No	No	No	No	No	No	No
Isopropanol	No	No	Yes	No	No	No	No
Methanol	No	No	Yes	No	U154	No	Yes

Chemical Weapons Convention: No TSCA 12(b): No CDTA: Yes

SARA 311/312: Acute: Yes, Chronic: Yes, Fire: Yes, Reactivity: No

 This product contains methanol and mercuric chloride which are known to the state of California to cause birth defects or other reproductive harm. For more information go to www.P65warnings.ca.gov.

Section XVI - Other Information

This information is believed to be correct at the time of publication but is not guaranteed as such, nor does it purport to be all inclusive. Medical Chemical Corp. assumes no liability for the accuracy

or completeness of the information. The user assumes all responsibility for compliance with federal, state and local laws.

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