



Safety Data Sheet

According to Regulation (EC) No. 1907/2006
OSHA Regulation 29 CFR 1910.1200
Canadian Regulation SOR/88-66

Revision Date: 2012-05-25
Reason for Revision: Section 14 Updated

SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

Product Name: HI 70632 Electrode Cleaning Solution for Food Processing and Preparation
Additional Product Codes: HI 70632L
HI 70632M

Application: Cleans and Disinfects Electrodes of Blood Products

Company Information (USA): Hanna Instruments, Inc.
584 Park East Dr, Woonsocket, Rhode Island, USA 02895

Technical Service Contact Information: 1-800-426-6287 (8:30AM - 5:00PM ET)
+1-401-766-4260 (8:30AM - 5:00PM ET)

USA Emergency Contact Information: 1-800-424-9300 (Chemtrec 24Hr. Emergency)

International Emergency Contact Information: +1-703-527-3887 (Chemtrec 24Hr. Emergency)

E-mail Address: tech@hannainst.com

SECTION 2: HAZARD IDENTIFICATION

Flammable.

SECTION 3: COMPOSITION AND COMPONENT INFORMATION

Component: Ethyl Alcohol

EC-No.: 200-578-6

CAS-No.: 64-17-5

Hazard: F

Phrases: R: 11

Content: > 40% - < 70%

SECTION 4: FIRST AID MEASURES

After Inhalation: Remove to fresh air.

After Skin Contact: Wash affected area with plenty of water. Remove contaminated clothing.

After Eye Contact: Rinse out with plenty of water for at least 10 minutes. Obtain medical attention.

After Swallowing: Immediately make victim Drink plenty of water. Summon doctor.

General Information: Remove contaminated, soaked clothing immediately and dispose of safely.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Foam, Dry Powder, Carbon Dioxide

Special Risks:

Combustible. Vapors heavier than air. Forms explosive mixtures with air at ambient temperatures. Keep away from sources of ignition.

Special Protective Equipment:

Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.

Additional Information:

Cool container with spray water from a safe distance. Take measures to prevent electrostatic charging.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Avoid substance contact. Do not inhale vapors. Ensure supply of fresh air in enclosed rooms.

Environmental Precautions:

Do not discharge into the drains/surface waters/groundwater.

Additional Notes:

Take up with liquid-absorbent material. Clean up affected area and dispose according to local regulation.

SECTION 7: HANDLING AND STORAGE

Handling:

Takes measures to prevent electrostatic charging. Keep away from sources of ignition. Work under hood. Do not inhale substance. Avoid generation of vapors/aerosols.

Storage:

Tightly closed. In a well ventilated place. Keep away from sources of ignition and heat. Store at room temperature (+15 to +25 °C recommended). Protect from light and moisture. Accessible only for authorized persons.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Type	Value	Source	Type	Value	Source
Ethanol (Denatured)					
TWA (8hr)	1907 mg/m ³	Belgium	TWA (8hr)	1900 mg/m ³	Canada (Ontario)
TWA (8hr)	1880 mg/m ³	Canada (Quebec)	TWA (8hr)	1900 mg/m ³	France
TWA (8hr)	960 mg/m ³	Germany	TWA (8hr)	1900 mg/m ³	Greece
TWA (8hr)	1900 mg/m ³	Hungary	TWA (8hr)	260 mg/m ³	Netherlands
TWA (8hr)	1900 mg/m ³	Poland	TWA (8hr)	1000 ppm	Portugal
TWA (8hr)	1900 mg/m ³	Romania	TWA (8hr)	1910 mg/m ³	Spain
TWA (8hr)	1920 mg/m ³	UK	TWA (8hr)	1000 ppm	USA (ACGIH)
TWA (8hr)	1900 mg/m ³	USA (OSHA)			

Engineering:

Maintain general industrial hygiene practice.

Personal Protective Equipment:

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled.

Respiratory Protection:

Required when vapors/aerosols are generated. Work under hood.

Protective Gloves:

Rubber or plastic

Eye Protection:

Goggles or face mask

Industrial Hygiene:

Change contaminated clothing. Apply skin-protective barrier cream. Wash hands after working with substance.

SECTION 9: PHYSICAL/CHEMICAL PROPERTIES

Appearance:	Colorless liquid	Odor:	Alcohol-like odor	Density at 20°C:	0.91 g/cm ³
Melting Point:	ND	Boiling Point:	ND	Solubility:	Soluble
pH at 20°C:	ND	Explosion Limit:	Lower not available Upper not available	Flash Point:	~ 23°C
Thermal Decomp.:	NA				

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SECTION 10: STABILITY AND REACTIVITY

Conditions to be Avoided:

Heating

Hazardous Polymerization:

Will not occur.

Further Information:

Flammable. Explosive with air in a vaporous/gaseous state.

Hazardous Decomposition Products:

No information available.

Substances to be Avoided:

No information available

SECTION 11: TOXICOLOGICAL INFORMATION

Product Toxicity

APPLICABLE TO MAIN COMPONENT:

Specific symptoms in animal studies:

Eye irritation test (rabbit): Irritations (ethanol).

Skin irritation test (rabbit): No irritation (ethanol). Subacute to chronic toxicity

Applicable to the main component:

Sensitization:

Sensitisation test (Magnusson and Kligman): negative.

Bacterial mutagenicity: Salmonella typhimurium: negative.

Bacterial mutagenicity: Ames test: negative.

Potential Health Effects:

Inhalation: Slight mucosal irritations. Risk of absorption.

Skin Contact: After long-term exposure to the chemical: dermatitis.

Eye Contact: Slight irritations.

Ingestion: Nausea, vomiting, diarrhoea.

Further Data: Systemic effects: euphoria. After absorption of large amounts: salivation dizziness, inebriation, narcosis, respiratory paralysis. The product should be handled with the usual care when dealing with chemicals.

Component Toxicity

Acute Toxicity:

Ethanol (Denatured)

LD50: Oral - Rat - 7060 mg/kg

Additional Data:

Not Available

Chronic Toxicity:

Not Available

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SECTION 12: ECOLOGICAL INFORMATION

APPLICABLE TO MAIN COMPONENT:

Abiotic degradation:

Rapid degradation. (air)

Biologic degradation:

Biodegradation: 94 % modified OECD screening test;

Readily biodegradable.

Behavior in environmental compartments:

Distribution: log p(o/w): -0.32 (ethanol);

No bioaccumulation is to be expected (log P(o/w <1).

Ecotoxic effects:

Biological effects:

In high concentrations: Harmful effect on aquatic organisms. When used properly, no impairments in the function of waste-water treatment plants are to be expected.

Fish toxicity: L.idus LC 50 : 8140 mg/L /48 h;

Daphnia toxicity: Daphnia magna EC 50 : 9268-14221 mg/L /48 h;

Maximum permissible toxic concentration:

Algal toxicity: Sc.quadricauda IC 5 : 5000 mg/L /7 d; Bacterial toxicity: Ps.putida EC 5 : 6500 mg/L /16

h; Protozoa: E.sulcatum EC 5 : 65 mg/L /72 h.

Further ecologic data:

BOD 5 : 0.93-1.67 g/g; COD: 1.99 g/g; TOD: 2.10 g/g; BOD 74 % from TOD /5 d; COD 90 % from TOD;

Further Data: No ecological problems are to be expected when the product is handled and used with due care and attention.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Chemical residues are generally classified as special waste and thus covered by local regulations. Contact local authorities or disposal companies for advice. Handle contaminated packaging in the same way as the substance itself.

SECTION 14: TRANSPORTATION INFORMATION

	<i>Land (ADR/RID):</i>	<i>Sea (IMDG):</i>	<i>Air (ICAO/IATA):</i>
UN No.:	1170	1170	1170
Proper Shipping Name:	Ethanol solution	Ethanol solution	Ethanol solution
Class (Sub Risk):	3	3	3
Packing Group:	III	III	III

SECTION 15: REGULATORY INFORMATION

Labeling according to EC Directives:

Symbol: Not applicable

R-phrases: 10: Flammable.

S-phrases: 16: Keep away from sources of ignition - No smoking.

SECTION 16: OTHER INFORMATION

Text of R-phrases under Section 3

NA

Revision Information

Revision Date: 2012-05-25

Supersedes edition of: 2009-06-10

Reason for revision: Section 14 Updated

Legend

NA: Not Applicable

ND: Not Determined

THE INFORMATION CONTAINED HEREIN IS BASED ON THE PRESENT STATE OF OUR KNOWLEDGE. IT CHARACTERIZES THE PRODUCT WITH REGARD TO THE APPROPRIATE SAFETY PRECAUTIONS. IT DOES NOT REPRESENT A GUARANTEE OF THE PROPERTIES OF THE PRODUCT.