HI 70631 Electrode Cleaning Solution for Food Processing and Preparation

Safety Data Sheet

Revision Date: 2008-12-01
Reason for Revision: REACH Compliance and General Update

SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

**Product Name:** HI 70631 Electrode Cleaning Solution for Food Processing and Preparation

**Application:** Alkaline Cleaning of Meat Grease and Fats from Electrodes

**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

Highly flammable. Causes severe burns.

SECTION 3: COMPOSITION AND COMPONENT INFORMATION

<table>
<thead>
<tr>
<th>Component</th>
<th>EC-No.: 215-185-5</th>
<th>CAS-No.: 1310-73-2</th>
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<tbody>
<tr>
<td>Sodium Hydroxide</td>
<td>200-578-6</td>
<td>64-17-5</td>
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<tr>
<td>Ethyl Alcohol</td>
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**Hazard:**
R: 35
R: 11
> 5% - < 15%
> 90%

SECTION 4: FIRST AID MEASURES

**After Inhalation:** Remove to fresh air. Call in physician.
**After Skin Contact:** Wash effected area with plenty of water. Dab with polyethylene glycol 400. Immediately remove contaminated clothing.
**After Eye Contact:** Rinse out with plenty of water for at least 10 minutes with the eyelid held wide open. Immediately call in ophthalmologist.
**After Swallowing:** Make victim drink plenty of water (if necessary several liters), avoid vomiting (risk of perforation!). Immediately call in physician. Do not attempt to neutralize.
**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.
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. Render harmless: neutralize with diluted sulfuric acid solution.

SECTION 7: HANDLING AND STORAGE

Handling:

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

Ingredients:
UK
Name: Ethanol
Type: LTEL
Value: 1920 mg/m³

USA - OSHA
Name: Sodium Hydroxide
Type: PEL
Value: 2 mg/m³

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: 0.94 g/cm³

Melting Point: ND
Boiling Point: ND
Solubility: Soluble

pH at 20° C: 14
Explosion Limit: Lower 3.5 vol% (ethanol)
Flash Point: ~ 12°C (ethanol) c.c.

Thermal Decom.: NA
### 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.
- Incompatible with various metals, various alloys, various plastics, animal/vegetable tissues, glass.

**Hazardous Decomposition Products:**

- No information available.

**Substances to be Avoided:**

- Alkali metals, alkaline earth metals, alkali oxides, strong oxidizing agents, halogen-halogen compounds, CrO₃, chromyl chloride, ethylene oxide, fluorine, perchlorates, potassium permanganate / sulfuric acid, perchloric acid, permanganic acid, phosphorus oxides, nitric acid, nitrogen dioxide, uranium hexafluoride, hydrogen peroxide.

### SECTION 11: TOXICOLOGICAL INFORMATION

**APPLICABLE TO MAIN COMPONENT:**

- Acute toxicity:
  - LC₅₀ (inhalation, rat): >8000 mg/L /4 h (ethanol).
  - LD₅₀ (dermal, rabbit): >20000 mg/kg (ethanol).
  - LD₅₀ (oral, rat): 6200 mg/kg (ethanol).
- 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:
    - Sensitization test (Magnusson and Kligman): negative.
    - Bacterial mutagenicity: Salmonella typhimurium: negative.
    - Bacterial mutagenicity: Ames test: negative.

**In Case of Inhalation:** Irritation symptoms in the respiratory tract.

**In Case of Skin Contact:** Burns.

**In Case of Eye Contact:** Burns. Risk of blindness! Risk of corneal clouding.

**In Case of Ingestion:** Burns. Risk of perforation in the oesophagus and stomach.

**Further Data:** Systemic effects: Narcosis. The product should be handled with the usual care when dealing with chemicals.

### 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: Harmful effect on aquatic organisms. Harmful effect due to pH shift.
- Fish toxicity: L. dux LC₅₀ : 8140 mg/L /48 h (ethanol).
- Daphnia toxicity: Daphnia magna EC₅₀ : 9268-14221 mg/L /48 h (ethanol).

**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.
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SECTION 14: TRANSPORTATION INFORMATION

<table>
<thead>
<tr>
<th>Land:</th>
<th>Sea:</th>
<th>Air:</th>
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<tr>
<td>ADR/RID: 3, II</td>
<td>IMDG: 3/UN 2924/PG II</td>
<td>ICAO/IATA: 3/UN 2924/PG II</td>
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<tr>
<td>UN-No.: 2924</td>
<td>Name: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (POTASSIUM HYDROXIDE SOLUTION IN ETHANOL).</td>
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Transport data applies to the COMPLETE KIT!

SECTION 15: REGULATORY INFORMATION

Labeling according to EC Directives:

- Symbol: C: Corrosive
  F: Flammable


S-phrases: 16-26-37/39-45: Keep away from sources of ignition - No smoking. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Contains: Sodium hydroxide

SECTION 16: OTHER INFORMATION

Text of R-phrases under Section 3

<table>
<thead>
<tr>
<th>Revision Information</th>
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<tr>
<td>Revision Date: 2008-12-01</td>
<td>NA: Not Applicable</td>
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<tr>
<td>Supersedes edition of: 2008-01-18</td>
<td>ND: Not Determined</td>
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<td>Reason for revision: REACH Compliance and General Update</td>
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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.