

Revision Date: 2008-12-01

Reason for Revision: REACH Compliance and General Update

SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

Product Name: HI 4000-00 ISA for Halide Electrodes

Additional Product Codes:

Application: ISA for Halide 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

Contact with combustible material may cause fire. Harmful if swallowed. Irritating to eyes.

SECTION 3: COMPOSITION AND COMPONENT INFORMATION

Component: Sodium Nitrate

EC-No.: 231-554-3

CAS-No.: 7631-99-4

Hazard: O, Xn

Phrases: R: 8-22-36

Content: > 15% - < 40%

SECTION 4: FIRST AID MEASURES

After Inhalation: Remove to fresh air. Consult a doctor if feeling unwell.

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

After Eye Contact: Rinse out with plenty of water with the eyelid held wide open. Call in ophthalmologist.

After Swallowing: Make victim drink plenty of water induce vomiting. Call in physician.

General Information: Not available

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Water spray, Carbon Dioxide, Dry Chemical Powder, Appropriate Foam.

Special Risks:

Non-combustible. Fire-promoting. Keep away from combustible materials. Development of hazardous combustion gases or vapours possible in the event of fire. The following may develop in event of fire: Nitrogen Oxides

Special Protective Equipment:

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

Additional Information:

Contain escaping vapours with water. Prevent fire-fighting water from entering surface water or groundwater.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:

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

Environmental Precautions:

Take up with liquid-absorbent material. Forward for disposal. Clean up affected area.

Additional Notes:

None

SECTION 7: HANDLING AND STORAGE

Handling:

Do not inhale substance. Avoid generation of vapours/aerosols.

Storage:

Tightly closed. Store at room temperature (+15 to +25 °C recommended). Away from combustible materials and sources of ignition and heat.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Ingredients:

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. The resistance of the protective clothing to chemicals should be established with the respective supplier.

Respiratory Protection:

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

Protective Gloves:

Rubber or plastic

Eye Protection:

Goggles or face mask

Industrial Hygiene:

Immediately change contaminated clothing. Apply skin-protective barrier cream. Wash hands and face after working with substance.

SECTION 9: PHYSICAL/CHEMICAL PROPERTIES

Appearance: Colorless liquid

Odor: Odorless

Density at 20° C: 1.25 g/cm³

Melting Point: ND

Boiling Point: ND

Solubility: Soluble

pH at 20° C: ~ 7

Explosion Limit: NA

Flash Point: ND

Thermal Decomp.: NA

SECTION 10: STABILITY AND REACTIVITY

Conditions to be Avoided:

Heating

Hazardous Polymerization:

Will not occur.

Further Information:

Not available

Hazardous Decomposition Products:

In the event of fire: See section 5.

Substances to be Avoided:

Combustible substances, metals in powder form, cyanides (heat), carbon, oxidizable substances, performic acid, sulfur, alkali metals, acetic acid anhydride, polyvinyl chloride, sodium phosphate, sodium thiosulfate, aluminium oxide, boron phosphide

SECTION 11: TOXICOLOGICAL INFORMATION

Quantitative data on the toxicity of this product is not available.

In Case of Inhalation:

In Case of Skin Contact: Irritations.

In Case of Eye Contact: Irritations.

In Case of Ingestion: Mucosal irritations, nausea, diarrhoea, vomiting.

Further Data: Further hazardous properties cannot be excluded. The product should be handled with the usual care when dealing with chemicals. Other notes: the following applies to nitrites/nitrates in general: methaemoglobinaemia (after the uptake of large quantities) with headache, cardiac arrhythmia, drop in blood pressure, dyspnoea, and spasms, key symptom: cyanosis (blue coloration of the blood).

SECTION 12: ECOLOGICAL INFORMATION

Quantitative data on the ecotoxicity of this product is not available.

APPLICABLE TO PARTIAL COMPONENT:

The following applies to Sodium nitrate – as the pure substance:

Methods for the determination of biodegradability are not applicable to inorganic substances.

Behavior in environmental compartments:

Distribution: log p(o/w): -3.8 (25 °C) (experimental);

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

Ecotoxic effects:

Biological effects:

Fish toxicity: *Ictalurus punctatus* LC50: 6200 mg/L /96 h;

Daphnia toxicity: *Daphnia magna* EC50: 3581 mg/L /48 h.

Further Data: The following applies to nitrates in general: may contribute to the eutrophication of water supplies. Hazard for drinking water. Fish: LC50 > 500 mg/L. Do not allow to enter waters, waste water, or soil!

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

Land:

ADR/RID: 5.1 PGIII
 UN-N: 3218
 Name: nitrates, inorganic, aqueous solution, n.o.s. (sodium nitrate solution)

Sea:

IMDG: 5.1/UN 3218/PGIII
 Name: nitrates, inorganic, aqueous solution, n.o.s. (sodium nitrate solution).

Air:

ICAO/IATA: .1/UN 3218/PGIII
 Name: nitrates, inorganic, aqueous solution, n.o.s. (sodium nitrate solution).

Transport data applies to the COMPLETE KIT!

SECTION 15: REGULATORY INFORMATION

Labeling according to EC Directives:

Symbol: O: Oxidising
 Xn: Harmful

R-phrases: 8-22-36: Contact with combustible material may cause fire. Harmful if swallowed. Irritating to eyes.

S-phrases: 22-24-41: Do not breathe dust. Avoid contact with skin. In case of fire and/or explosion do not breathe fumes.

Contains: Sodium nitrate

SECTION 16: OTHER INFORMATION

Text of R-phrases under Section 3

8:Contact with combustible material may cause fire.
22:Harmful if swallowed.
36:Irritating to eyes.

Revision Information

Revision Date: 2008-12-01
Supersedes edition of: 2006-06-27
Reason for revision: REACH Compliance and General Update

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.