

Health & Safety data sheet
According to EC Directive 91/155/EC and following amendments

Date of issue: 04 November 2004.

SECTION 1 - IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

Product name:

- HI 3811-0 Solution.

Application:

- Titration reagent.

Manufacturer identification:

Hanna Instruments Italia s.r.l.
viale delle Industrie, 12/A
35012 Villafranca Padovana, Italy
tel. n°.:+39-049-9070211

Emergency Telephone n. °: no hazardous product.

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

Aqueous solution.

SECTION 3 - HAZARD IDENTIFICATION

No hazardous product as specified in Directive 67/548/EEC.

SECTION 4 - FIRST AID MEASURES

- **After inhalation** : if inhaled remove to fresh air. If breathing becomes difficult, call a physician.
- **After skin contact** : wash off with water and soap.
- **After eye contact** : rinse out with plenty of water for at least 15 minutes. If pain persists, summon medical advice.
- **After swallowing** : immediately make victim drink plenty of water. Summon doctor if pain persists.

SECTION 5 – FIRE-FIGHTING MEASURES

- **Suitable extinguishing media**
 - Water spray, foam, dry powder or carbon dioxide.
- **Special risks:**
 - Non combustible. Development of hazardous combustion gases or vapors possible in the event of fire.
 - The following may develop in the event of fire: hydrochloric acid.
- **Special protective equipment for fire fighting:**
 - Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.
- **Additional information:**
 - Contain escaping vapors with water.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

- **Personal precautions:**
 - Do not inhale vapours/aerosols.
- **Procedures for cleaning / absorption:**
 - Take up with liquid-absorbent material. Forward for disposal. Clean up affected area.
- **Additional notes:**
 - Render harmless: neutralize with diluted sodium hydroxide solution or by throwing on lime, lime sand, or sodium carbonate.

SECTION 7 - HANDLING AND STORAGE

- **Handling:**
 - Cannot be stored indefinitely.
- **Storage:**
 - Tightly closed. In a well-ventilated place. At +15°C to +25°C.

SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

- **Personal protective equipment:**
 - As appropriate to quantity handled.
- **Protective gloves:**
 - Rubber or plastic.
- **Respiratory protection:**
 - Required when vapors/aerosols are generated.
- **Eye protection:**
 - Goggles or face mask.

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SECTION 9 - PHYSICAL/CHEMICAL PROPERTIES

- | | | | |
|------------------------------|--------------------|-------------------------------|-------------------------|
| • Appearance | : colorless liquid | • density at 20°C | : 1.0 g/cm ³ |
| • Odor | : odorless | • flash point | : NA |
| • Solubility in water | : soluble | • explosive properties | : NA |
| • Melting point | : NA | • explosion limits | : NA |
| • Boiling point | : > 100 °C | • ignition temperature | : NA |
| • pH value at 20°C | : <2 | | |

SECTION 10 - STABILITY AND REACTIVITY

- | | |
|--|------------------------------------|
| • Conditions to be avoided: | • Substances to be avoided: |
| - Heating. | - Metals. |
| • Hazardous decomposition products: | • Hazardous polymerization: |
| - In the event of fire: see section 5. | - Will not occur. |

SECTION 11 - TOXICOLOGICAL INFORMATION

Property that must be anticipated on the basis from the components of the preparation:

- **After skin contact** : Slight irritations.
- **After eye contact** : Slight irritations.
- **Further data** : The product should be handled with the care usual when dealing with chemicals.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxic effects:

Quantitative data on the ecological effect of this product are not available.

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:**

Can be safely disposed of as an ordinary refuse.

SECTION 14 - TRANSPORT INFORMATION

- | | | |
|-------------------------|-------------------|-------------------|
| • Land transport | ADR/RID | : 9/UN 3316/PGIII |
| | Name | : CHEMICAL KIT |
| • Sea transport | IMDG | : 9/UN 3316/PGIII |
| | Name | : CHEMICAL KIT |
| | Marine pollutant: | no |
| • Air transport | ICAO/IATA | : 9/UN 3316/PGIII |
| | Name | : CHEMICAL KIT |

These transport data apply to the entire pack!

SECTION 15 - REGULATORY INFORMATION

Labeling according to EC Directives:

- | | |
|------------|---|
| Symbol: | - |
| R-phrases: | - |
| S-phrases: | - |
| Contains: | - |

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SECTION 16 - OTHER INFORMATION

- **Supersedes edition of** : June 2002.
- **Reason for revision** : change in labeling due to reevaluation of constituents.
- **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.