



**SAFETY DATA SHEET**  
HYDROCHLORIC ACID 24%

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Issued: 25/03/2004  
Revision No: 1

**1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING**

**Product name:** HYDROCHLORIC ACID 24%  
**CAS number:** 7647-01-0  
**EINECS number:** 231-595-7  
**Index number:** 017-002-01-X  
**Synonyms:** INHIBITED ACID

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**2. COMPOSITION / INFORMATION ON INGREDIENTS**

**Hazardous ingredients:** HYDROCHLORIC ACID 10-30%  
EINECS: 231-595-7  
[C] R34; [Xi] R37

**3. HAZARDS IDENTIFICATION**

**Main hazards:** Irritating to eyes, respiratory system and skin.

**4. FIRST AID MEASURES (SYMPTOMS)**

**Skin contact:** There may be irritation and redness at the site of contact.  
**Eye contact:** There may be irritation and redness. The eyes may water profusely.  
**Ingestion:** There may be soreness and redness of the mouth and throat.  
**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.

**4. FIRST AID MEASURES (ACTION)**

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water.  
**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.  
**Ingestion:** Wash out mouth with water. Consult a doctor.  
**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

[cont...]

**5. FIRE-FIGHTING MEASURES**

**Extinguishing media:** Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

**Exposure hazards:** In combustion emits toxic fumes.

**Protection of fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions:** Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid.

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding.

**Clean-up procedures:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

**7. HANDLING AND STORAGE**

**Handling requirements:** Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of mists in the air.

**Storage conditions:** Store in cool, well ventilated area. Keep container tightly closed.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Occupational exposure limits**

**STEL (15 min exposure limit):** 7.6 mg/m<sup>3</sup> (OES)

**Hazardous ingredients:** HYDROCHLORIC ACID...100%  
STEL (15 min exposure limit): 7.6 mg/m<sup>3</sup> (OES)

**Engineering measures:** Ensure there is sufficient ventilation of the area.

**Respiratory protection:** Self-contained breathing apparatus must be available in case of emergency.

**Hand protection:** Protective gloves.

**Eye protection:** Safety glasses. Ensure eye bath is to hand.

**Skin protection:** Protective clothing.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**State:** Liquid

**Colour:** Yellow-brown

**Odour:** Characteristic odour

**Oxidising:** Non-oxidising (by EC criteria)

**Solubility in water:** Miscible

**Also soluble in:** Ethanol. Diethyl ether. Benzene.

**Viscosity:** Viscous

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**Boiling point/range°C:** 110  
**Melting point/range°C:** -29  
**Flash point°C:** n/a  
**Relative density:** 1.12  
**pH:** <1

**10. STABILITY AND REACTIVITY**

**Stability:** Stable under normal conditions.  
**Conditions to avoid:** Heat.  
**Materials to avoid:** Bases. Reducing agents. Amines. AMMONIA  
**Haz. decomp. products:** In combustion emits toxic fumes.

**11. TOXICOLOGICAL INFORMATION**

**Routes of exposure:** Refer to section 4 of SDS for routes of exposure and corresponding symptoms.

**12. ECOLOGICAL INFORMATION**

**Mobility:** Readily absorbed into soil.  
**Persistence and degradability:** Biodegradable.  
**Bioaccumulative potential:** No bioaccumulation potential.  
**Other adverse effects:** Negligible ecotoxicity.

**13. DISPOSAL CONSIDERATIONS**

**Disposal of packaging:** Arrange for collection by specialised disposal company.  
**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

**14. TRANSPORT INFORMATION****ADR / RID**

<b>UN no:</b> 1789	<b>ADR Class:</b> 8
<b>Packing group:</b> III	<b>Classification code:</b> C1
<b>Shipping name:</b> HYDROCHLORIC ACID	
<b>Labelling:</b> 8	<b>Hazard ID no:</b> 80

**IMDG / IMO**

<b>UN no:</b> 1789	<b>Class:</b> 8
<b>Packing group:</b> III	<b>EmS:</b> F-A,S-B
<b>Marine pollutant:</b> NO	<b>Labelling:</b> 8

**SAFETY DATA SHEET**  
HYDROCHLORIC ACID 24%**IATA / ICAO**

**UN no:** 1789 **Class:** 8  
**Packing group:** III **Packing instructions:** 819(P&CA); 821(CAO)  
**Labelling:** 8

**15. REGULATORY INFORMATION**

**Hazard symbols:** Irritant.



**Risk phrases:** R36/37/38: Irritating to eyes, respiratory system and skin.

**Safety phrases:** S23: Do not breathe ...

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S41: In case of fire and / or explosion do not breathe fumes.

S60: This material and its container must be disposed of as hazardous waste.

**Note:** The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

**16. OTHER INFORMATION**

**Risk phrases used in s.2:** R34: Causes burns.

R37: Irritating to respiratory system.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.