

## SAFETY DATA SHEET

### MATRIX

Revision 4  
Revision date 30-Oct-2006

#### 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

**Product name** MATRIX  
**Company** Merlin Chemicals Ltd  
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#### 2. COMPOSITION / INFORMATION ON INGREDIENTS

##### Hazardous ingredients

	Conc.	CAS	EINECS	Symbols/Risk phrases
Alcohol Alkoxyolate	0.5 - 1%	69227-21-0		N;R50
Hydrochloric acid...%	20 - 30%		231-595-7	C; R34 Xi; R37

#### 3. HAZARDS IDENTIFICATION

**Main hazards** Causes burns. Irritating to respiratory system.

#### 4. FIRST AID MEASURES

**Skin contact** Irritating to skin. Wash off immediately with plenty of soap and water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist.  
**Eye contact** Irritating to eyes. Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention if irritation or symptoms persist.  
**Inhalation** Irritating to respiratory system. Move the exposed person to fresh air. Seek medical attention.  
**Ingestion** Harmful if swallowed. DO NOT INDUCE VOMITING. Rinse mouth thoroughly. Drink 1 to 2 glasses of water. Seek medical attention if irritation or symptoms persist.

#### 5. FIRE FIGHTING MEASURES

**Extinguishing media** Use extinguishing media appropriate to the surrounding fire conditions.  
**Fire hazards** Hydrogen Chloride.  
**Protective equipment** Wear: Self-contained breathing apparatus.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions** Ensure adequate ventilation of the working area. Wear suitable protective equipment.  
**Environmental precautions** Do not allow product to enter drains.  
**Clean up methods** Bund spill area, dilute with plenty of water and neutralise with lime slurry or sodium carbonate. Flush away with plenty of water.

#### 7. HANDLING AND STORAGE

**Handling** Avoid contact with eyes and skin. Ensure adequate ventilation of the working area.  
**Storage** Keep in a cool, dry, well ventilated area. Keep containers tightly closed.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Engineering measures</b>	Ensure adequate ventilation of the working area.
<b>Respiratory protection</b>	Wear suitable respiratory equipment when necessary.
<b>Hand protection</b>	Rubber gloves.
<b>Eye protection</b>	Approved safety goggles.
<b>Protective equipment</b>	Rubber boots.
<b>Environmental exposure controls</b>	Users should be aware of environmental considerations and their duties under The Environmental Protection Act.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Description</b>	Liquid.
<b>Colour</b>	Yellow.
<b>Odour</b>	Pungent.
<b>pH</b>	<1
<b>Boiling point</b>	105°C
<b>Relative density</b>	1.150
<b>Water solubility</b>	soluble in water.
<b>Melting point</b>	0°C

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under normal conditions.
<b>Conditions to avoid</b>	Attacks most common metals liberating hydrogen, which can form explosive mixtures with air. Can react violently with oxidising agents liberating chlorine.
<b>Materials to avoid</b>	Alkalis, concentrated sulphuric acid, oxidising agents, ammonia and amines.
<b>Hazardous decomposition products</b>	Hydrogen Chloride.

## 11. TOXICOLOGICAL INFORMATION

<b>Acute toxicity</b>	Inhalation of mists and vapour will cause irritation of the upper respiratory tract, high concentrations may cause corrosion, pulmonary oedema may occur upto 48 hours after exposure. Corrosive to skin, eyes and mucous membranes. Ingestion may cause damage to the gastrointestinal tract. repeated exposure to low levels may cause erosion of the teeth and ulceration of the nasal septum and gums.
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## 12. ECOLOGICAL INFORMATION

<b>Bioaccumulation</b>	Does not bioaccumulate.
<b>Further information</b>	Fatal to fish and other aquatic life due to low pH.

## 13. DISPOSAL CONSIDERATIONS

<b>General information</b>	Dispose of in compliance with all local and national regulations.
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## 14. TRANSPORT INFORMATION

### ADR/RID

UN 1789	Packing group II
Class 8	Hazard ID 80
Proper Shipping Name	HYDROCHLORIC ACID .

### IMDG

UN 1789	Packing group II
Class 8	Marine pollutant NO
EmS Code	F-A S-B

### IATA

UN 1789	Packing group II
Class 8	Subsidiary risk -
Packing Instruction (Cargo)	813
Packing Instruction (Passenger)	809
	Maximum quantity 30 L
	Maximum quantity 1 L

## 15. REGULATORY INFORMATION

### Symbols

C - Corrosive



### Risk phrases

R34 - Causes burns.  
R37 - Irritating to respiratory system.

### Safety phrases

S1/2 - Keep locked up and out of the reach of children.  
S13 - Keep away from food, drink and animal feedingstuffs.  
S25 - Avoid contact with eyes.  
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S28 - After contact with skin, wash immediately with plenty of water.  
S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.  
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
S46 - If swallowed, seek medical advice immediately and show this container or label.

## 16. OTHER INFORMATION

### Text of risk phrases in Section 2

R34 - Causes burns.  
R37 - Irritating to respiratory system.  
R50 - Very toxic to aquatic organisms.

### Further information

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. This version replaces all previous versions.

### Revision

This document differs from the previous version in the following areas:  
[] - [].