

## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Chemical Name:** 1-(Ferrocenyl)ethanol  
**Synonyms:** alpha-Methylferrocenemethanol  
**Formula:** C<sub>12</sub>H<sub>14</sub>FeO  
**Supplier:** Watson International Ltd  
**Telephone No:** 86-512-81867280  
**Fax No:** 86-512-81867270

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

No.	Name
1.	1-(Ferrocenyl)ethanol

  

No.	CAS No.	R Phrases	Concentration	Classification
1.	1277-49-2	R22/R36/R37/R38	98.0% (w/w)	Xn
2.		-	2.0% (w/w)	Ik
3.				

**Legend:** Tx = Very Toxic, C = Corrosive, Xn = Harmful, Xi = Irritant, Ik = No Classification Required, E = Explosive, O = Oxidizing, Fx = Extremely Flammable, F = Very Flammable, Fo = Flammable, N = Dang. To the Environment, M = Genotoxic, A = Sensitizing, K = Carcinogenic, R = Causes birth defects, H = skin absorption

### 3. HAZARDS IDENTIFICATION

#### Hazard Statements:

Causes skin irritation  
Causes serious eye irritation.  
May cause respiratory irritation.

#### Precautionary Statements:

Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Continue rinsing.

#### Potential Health Effects:

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.  
Skin: May be harmful if absorbed through skin. Causes skin irritation.  
Eyes: Causes eye irritation.  
Ingestion: May be harmful if swallowed

### 4. FIRST-AID MEASURES

**General:** Consult a physician. Show this safety data sheet to the doctor in attendance.  
Move out of dangerous area.

**Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial

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	respiration. Consult a physician.
<b>Skin Contact:</b>	Wash off with soap and plenty of water. Consult a physician.
<b>Eye Contact:</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
<b>Swallow:</b>	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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## 5. FIRE-FIGHTING MEASURES

<b>Conditions of flammability:</b>	Not flammable or combustible.
<b>Suitable extinguishing media:</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Special protective equipment for firefighters</b>	Wear self contained breathing apparatus for firefighting if necessary.
<b>Hazardous combustion products</b>	Hazardous decomposition products formed under fire conditions. - Carbon oxides, Iron oxides.

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## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions:</b>	Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
<b>Environmental Precautions:</b>	Do not let product enter drains.
<b>Methods for Cleaning Up:</b>	Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

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## 7. HANDLING AND STORAGE

<b>Handling:</b>	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
<b>Storage:</b>	Keep container tightly closed in a dry and well-ventilated place. Keep in a dry place.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Respiratory protection:</b>	For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
<b>Hand protection:</b>	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
<b>Eye protection:</b>	Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

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<b>Skin and body protection:</b>	Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
<b>Hygiene measures:</b>	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
<b>Specific engineering control</b>	Use mechanical exhaust or laboratory fume hood to avoid exposure.

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Powder
<b>Color:</b>	Yellow
<b>pH:</b>	No data available
<b>Boiling Point/Boiling Range:</b>	No data available
<b>Melting Point/Melting Range:</b>	76 - 79 °C (169 - 174 °F)
<b>Flash Point:</b>	No data available
<b>Ignition temperature:</b>	No data available
<b>Lower explosion limit:</b>	No data available
<b>Upper explosion limit:</b>	No data available
<b>Vapor pressure:</b>	No data available
<b>Density:</b>	No data available

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### 10. STABILITY AND REACTIVITY

<b>Chemical stability:</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions:</b>	No data available.
<b>Conditions to avoid:</b>	No data available.
<b>Materials to avoid:</b>	Strong oxidizing agents.
<b>Hazardous decomposition products:</b>	Hazardous decomposition products formed under fire conditions. - Carbon oxides, Iron oxides Other decomposition products - no data available

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### 11. TOXICOLOGICAL INFORMATION

<b>Acute Toxicity:</b>	LD50 Intravenous - mouse - 100 mg/kg
<b>Irritation:</b>	No data available

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### 12. ECOLOGICAL INFORMATION

<b>Mobility:</b>	No data available.
<b>Degradability:</b>	No data available.
<b>Accumulation:</b>	No data available.

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### 13. DISPOSAL CONSIDERATIONS

<b>Product and Waste:</b>	Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this
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material.

**Containers:**

Dispose of as unused product.

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## 14. TRANSPORT INFORMATION

**DOT (US):** Not dangerous goods

**IMDG:** Not dangerous goods

**IATA:** Not dangerous goods

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## 15. REGULATORY INFORMATION

Contains 1-(Ferrocenyl)ethanol 98.0% w/w

Xn-Harmful

### R- PHRASES

- R22** –Harmful if swallowed.
- R36** –Irritating to eyes.
- R37** –Irritating to respiratory system.
- R38** – Irritating to skin.

### S- PHRASES

- S26** –In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
  - S37** –Wear suitable gloves.
  - S39** –Wear eye / face protection.
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## 16. OTHER INFORMATION

Packing:

25kg / drum

Or as per request.

Revision:

Date Prepared: 4/5/2012

### DISCLAIMER

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**BY: Watson International Ltd**

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