

## 1: Identification of substance / mixture

### 1. Product Identifier

Substance

Product Name **1-Methylimidazole**  
Product Code 995002  
CAS Number 616-47-7  
Other Names  
IUPAC  
MFCD Number MFCD00005292  
EC/EINECS 210-484-7  
REACH Number 01-2119979544-23-0000 Index-No 613-035-00-7

### 2. Relevant identified uses of the substance or mixture and uses advised against

Research and Development

### 3. Details of the supplier of the safety data sheet

Fluorochem Ltd  
Unit 14, Graphite Way  
Hadfield  
Derbyshire  
SK13 1QH  
UK

Telephone: +44(0)1457 860111  
Fax: +44(0)1457 892799  
Email: sds@fluorochem.co.uk



### 4. Emergency telephone number

+44(0)7855 268577 -

## 2. Hazards Identification

### 1. Classification of the substance or mixture

H302	Acute Tox. 4	
H311	Acute Tox. 3	
H314	Skin Corr. 1B	

### 2. Label elements

Signal Word **Danger**



### Hazard Statements

H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.

### Precautionary Phrases

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P501	Dispose of contents/container to local regulations.

### 3. Other Hazards

Additional precautionary phrases are located throughout the safety data sheet

## 3. Composition / Information on Ingredients

### 1. Substances

Product Name	Hazards	Concentration
1-Methylimidazole		

CAS Number: 616-47-7  
EC/EINECS: 210-484-7  
: 01-2119979544-23-0000

H302, H311, H314 Acute Tox. 3, Acute Tox. 4, Skin  
Corr. 1B

<=100%

## 4. First Aid Measures

### 1. Description of first aid measures

- Skin Contact* P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
Consult a doctor.  
Wash immediately with plenty of soap and water.  
Transfer to hospital if there are burns or symptoms of poisoning.
- Eye Contact* P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Bathe the eye with running water for 15 minutes.  
Consult a doctor.
- Ingestion* P301 + P330 + P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
Do not induce vomiting.  
Wash out mouth with water.  
Consult a doctor.
- Inhalation* Consult a doctor.

### 2. Most important symptoms and effects

There may be irritation and redness.

### 3. Indication of any immediate medical attention

P310: Immediately call a POISON CENTER or doctor/physician.  
No additional measures required

## 5. Firefighting measures

### 1. Extinguishing Media

- Suitable* Carbon dioxide.  
Dry chemical powder.  
Water.  
fight larger fires with water jet or alcohol resistant foam
- Unsuitable* no data

### 2. Special Hazards arising from the substance or mixture

In combustion emits toxic fumes of carbon dioxide / carbon monoxide.  
In combustion emits toxic fumes of hydrogen fluoride.

### 3. Advice for Fire Fighters

Wear self-contained breathing apparatus.  
Wear protective clothing to prevent contact with skin and eyes.

## 6. Accidental Release Measures

### 1. Personal Precautions

Refer to section 8 of SDS for personal protection details.

### 2. Environmental Precautions

Do not discharge into drains or rivers.  
Contain the spillage using bunding.

### 3. Methods & Materials

Absorb into dry earth or sand.  
Use neutralising agent.  
Transfer to a closable, labelled salvage container for disposal by an appropriate method.

## 4. Preventing the occurrence of secondary hazards.

No Special Measures Required

## 7. Handling and Storage

### 1. Personal Precautions

*Safe Handling* Ensure there is sufficient ventilation of the area.  
Handle under Nitrogen and protect from moisture. P264: Wash hands thoroughly after handling.  
P270: Do not eat, drink or smoke when using this product.

*Protection against explosions and fires* P361: Remove/Take off immediately all contaminated clothing.  
P363: Wash contaminated clothing before reuse.  
Keep ignition sources away- do not smoke (smoking kills)

### 2. Conditions for safe storage, including any incompatibilities

*Managing Storage Risks* Store in cool, well ventilated area.  
Keep away from sources of ignition.  
Keep container tightly closed.  
Store under nitrogen.

*Storage Controls* Refrigerate

*Maintaining Integrity* Store away from oxidising agents  
Keep in tightly closed container in cool area away from direct sunlight or heat sources.

*Other advice* no further information available

### 3. Specific End Uses

The end use(s) have not been fully determined. The substance is supplied for Research and Development purposes by professionals only.

## 8. Exposure Controls/Personal Protection

### 1. Control Parameters

No Data Available

### 2. Exposure Controls

*General protective and hygiene measures* P280: Wear protective gloves/protective clothing/eye protection/face protection.  
Wash hands during breaks and at the end of handling the material  
Immediately remove any contaminated clothing

*Engineering measures* Use only in a chemicals fume hood.

*Eye / Face Protection* Safety Glasses with side-shields.  
Face-shield.

*Hand protection* The selected Gloves have to satisfy the specifications of EU directive 89/686/EEC and the standard EN 374 derived from it.

*Respiratory protection* P260: Do not breathe dust/fume/gas/mist/vapours/spray.  
Self-contained breathing apparatus must be available in case of emergency.

*Skin protection* Gloves must be inspected prior to use.  
Use proper glove removal technique to avoid skin contact with this product.  
Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practice.  
Wash and dry hands.  
Protective clothing.

*Other personal protection advice* no data

## 9. Physical and Chemical Properties

## 1. Physical and Chemical Properties

Appearance	Liquid
Odour	Amine-like
Odour threshold	No Data Available
PH	9.5-11.5 @ 100g/l @ 20°C
Melting point / Freezing point	-6°C
Initial boiling point and boiling range	198°C
Flash point	92°C
Evaporation rate	No Data Available
Flammability(solid,gas)	No Data Available
Upper/lower flammability or explosive limits	15.7% (V)/2.7% (V)
Vapour pressure	0.5 hPa @ 20°C
Vapour density	No Data Available
Relative density	1.03 g/ml @ 25°C
Solubility(ies):	Miscible in water
Partition coefficient: n-octanol/water	No Data Available
Auto-ignition temperature	No Data Available
Decomposition temperature	No Data Available
Viscosity	No Data Available
Explosive properties	No Data Available
Oxidising properties	No Data Available

## 2. Other Information

No additional information available

## 10. Stability and Reactivity

### 1. Reactivity

Hygroscopic

### 2. Stability

Stable under normal conditions.

### 3. Possibility of Hazardous Reactions

no hazardous reactions known

### 4. Conditions to Avoid

no specific conditions to avoid

### 5. Incompatible Materials

Oxidising agents.  
 Water.  
 Acids.

### 6. Hazardous Decomposition Products

In combustion emits toxic fumes of carbon dioxide / carbon monoxide.  
 In combustion emits toxic fumes of hydrogen fluoride.

## 11. Toxicology information

### 1. Information

<i>Acute Toxicity</i>	Oral LD50 (Rat) 1,130mg/kg Dermal LD50 (Rabbit) 400-640mg/kg
<i>Skin corrosion/irritation</i>	irritant for skin and mucous membranes Rabbit-severe skin irritation
<i>Serious eye          Damage/irritation</i>	strong caustic effect. Rabbit-severe eye irritation

<i>Respiratory or skin sensitisation</i>	No sensitizing effect known
<i>Germ Cell mutagenicity</i>	not known
<i>Carcinogenicity</i>	not known
<i>Reproductive toxicity</i>	not known
<i>STOT-single exposure</i>	not known
<i>STOT-repeated exposure</i>	not known
<i>Aspiration hazard</i>	not known

## 2. Additional

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.  
No classification data on carcinogenic properties of this material is available from the EPA, IARC,NTP,OSHA or ACGIH  
swallowing will lead to a strong caustic effect on mouth and throat and the danger of perforation of oesophagus and stomach.

## 12. Ecological Information

### 1. Toxicity

Toxicity to fish:

LC50 - *Leuciscus idus* (Golden orfe) - 100-220mg/l - 96h

Toxicity to daphnia and other aquatic invertebrates:

EC50 - *Daphnia magna* (Water flea) - 268mg/l - 48h

Toxicity to algae:

EC50 - *Desmodesmus subspicatus* (green algae) - 180mg/l - 72h

### 2. Persistence and degradability

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

No classification data on carcinogenic properties of this material is available from the EPA, IARC,NTP,OSHA or ACGIH  
swallowing will lead to a strong caustic effect on mouth and throat and the danger of perforation of oesophagus and stomach.

### 3. Bio-Accumulative Potential

not known

### 4. Mobility and Soil

not known

### 5. Results of PBT & vPvB assessment

not known

### 6. Other adverse effects

Harmful to aquatic life

May be harmful to aquatic organisms due to the shift of the pH.

## 13. Disposal Considerations

### 1. Waste Treatment Methods

*Disposal Operations* Hand over to authorised disposal company as hazardous waste.

*Disposal of Packaging* Disposal must be made according to official regulations.

## 14. Transport Information

### Air (ICAO)

- UN Number:** 3267
- Shipping Name:** Corrosive liquid, basic, organic, n.o.s.
- Transport hazard class(es):** : 8 Sub Class :



4. **Packing group: II**
5. **Environmental hazards:**
6. **Special Precautions for user:**
7. **Transport in bulk:**

## Road (ADR)

1. **UN Number: 3267**
2. **Shipping Name: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S (1-Methylimidazole).**
3. **Transport hazard class(es) : 8 Sub Class :**



4. **Packing group: II**
5. **Environmental hazards:**
6. **Special Precautions for user:**
7. **Transport in bulk:**

## Sea (IMDG)

1. **UN Number: 3267**
2. **Shipping Name: Corrosive liquid, basic, organic, n.o.s.**
3. **Transport hazard class(es) : 8 Sub Class :**



4. **Packing group: II**
5. **Environmental hazards:**
6. **Special Precautions for user:**
7. **Transport in bulk: IBCINS: IBC02**

TANKPROV: TP2, TP27

## 15. Safety, health, environmental and national regulations

### 1. Safety, health, environmental and national regulations:

product is not subject to any additional regulations or provisions

### 2. Safety Assessment

No Chemical Safety Assessment

## 16. Other Information

### 1. Other Information:

ADR: Accord Europeen sur le transport des marchandises Dangereuses par Route(European Agreement concerning the International Carriage of Dangerous Goods by road)  
RID:Reglement International concernant le transport des marchandises dangereuses par chemin de fer (Regulations concerning the International transport of Dangerous Goods by Rail)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
IATA-DGR: Dangerous Goods Regulations by the International Air Transport Association  
ICAO:International Civil Aviation Organization  
ICAO-TI: Technical Instructions by the ICAO  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
CAS:Chemical Abstracts Service

### 2. Associated risk phrases according to European directive 67/548/EEC

### 3. Disclaimer

The product listed is for research and development purposes only and not for human or animal use. As such, in most cases, the toxicological, ecological and physicochemical properties have not been fully determined and the product should be treated with respect and always handled under suitable conditions by appropriately qualified personnel. The responsible party shall use this datasheet only in conjunction with other sources of information gathered by them, and should make an independent judgement of suitability, to ensure proper use and protect the health and safety of employees. This information is furnished without warranty and any use of the product not in conformance with this material safety data sheet, or in combination with any other product or process, is the responsibility of the user.