



Safety Data Sheet

According to Regulation (EC) no. 1907/2006

Product Name
IMIDAZOLE EXTRA PURE

1.0 Chemical product and company identification

1.1 Product Identifier

MSDS Name: IMIDAZOLE
Substance name: GLYOXALINE
CAS No: 288-32-4
PRODUCT CODE:

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance / Mixture: LABORATORY CHEMICALS

Recommended restrictions on use: Use only as above

1.3 Details of the supplier of the safety data sheet

Company Identification:
SOLUMETRICS LTD,
UNIT 1B SILEBY ROAD INDUSTRIAL ESTATE. BARROW ON SOAR, LEIC'S. LE12 8LP.
For information call. +44 (0)1509 815348
For emergencies call. +44 (0)1509 815348

2.0 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) no 1272/2008

2.1 Classification of the substance or mixture

ACUTE ORAL TOXICITY	CATEGORY 4
SKIN CORROSION / IRRITATION	CATEGORY 1
SERIOUS EYE DAMAGE/ EYE IRRITATION	CATEGORY 1
REPRODUCTIVE TOXICITY	CATEGORY 2

CLASSIFICATION ACCORDING TO EU DIRECTIVES 67/548/EEC OR 1999/45/EC

Hazard Symbol / Category of Danger

H314
H302
H318
H361d

Hazard Statements:

Causes severe skin burns and eye damage
Harmful if swallowed
Causes serious eye damage
Suspected of damaging the unborn child

Hazard Symbol / Category of Danger

R22
R63
R34

Risk Phrases

Harmful if swallowed
Possible risk to the unborn child
Causes Burns

For the full text of the R-Phrases in this section, see Section 16.

2.2 Label Elements

Labelling according to regulation (EC) No 1272/2008

HAZARDS SYMBOLS



Signal Word:

DANGER

Precautionary statements

Prevention

P280 Wear Protective gloves/ protective clothing/ eye protection/ face protection

Response

P301 + P330 + P331 If swallowed: rinse mouth. Do NOT induce vomiting
P281 Use personal protective equipment as required

P305 + P351 + P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor / physician if you feel unwell!
 P310 Immediately call a POISON CENTER or doctor/ Physician

3.0 Composition/ Information on ingredients

EC No	Component	GHSCLAS	Classification
EEC No. 206-019-2	1-IMIDAZOLE	Skin Corr - 1B (H314) Repr. 2 (H361d) Acute Tox. 4 (H302)	Xn: R22 C;R34 Repr.Cat. 3;R63
	Weight %	CAS No	
	>95	288-32-4	

4.0 First Aid measures

4.1 Description of first aid measures

General Advice

If Inhaled:

Remove from exposure. If breathing stops or show sign of failing, give artificial respiration. Obtain medical attention urgently. Keep warm and at rest. If there is difficulty in breathing, give oxygen. Do not use mouth to mouth ventilation.

In Case of Skin contact:

Wash off immediately with plenty of water for at least 15 minutes. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty

In case of eye contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult an eye specialist immediately. Go to an ophthalmic hospital if possible

If Swallowed:

Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician immediately.

5.0 FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing Media:

CO2, Dry Chemical, Dry Sand, Alcohol-Resistant Foam

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting:

Highly flammable. Vapours may form explosive mixtures in air-take precautionary measures against static discharges. The vapour is heavier than air and may travel a considerable distance to a source of ignition and will flash back. Combustion will evolve toxic vapours. Heating of the sealed container may cause a pressure rise with a risk of explosion.

5.3 Advice for fire-fighters

Special protective equipment for fire-fighters:

In the event of fire, wear self-contained breathing apparatus. Wear appropriate body protection (full protective suit)

6.0 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions:

Ventilate the area to dispel possible toxic decomposition fumes. Wear appropriate protective clothing. Use personal protective equipment. Keep away unprotected persons. Danger of slipping if spilled. Avoid contact with skin and eyes. Do not breathe vapours or spray mist.

6.2 Environmental precautions:

Contain and absorb using earth, sand or other inert material. Transfer into suitable containers for recovery or disposal. Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases

6.3 Methods and materials for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, Universal binders) Keep in suitable, closed containers for disposal.

Further Information: Advise Authorities if spillage has entered water course or sewer or has contaminated soil or vegetaion.

7.0 Handling and storage

7.1 Precautions for safe handling

Advice on safe handling: Keep containers tightly closed. Use personal Protective equipment. Provide sufficient air exchange and/ or exhaust in work rooms. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit. Avoid contact with the skin and the eyes. Avoid inhalation of vapour or mist. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.

Hygiene measures: Keep away from sources or ignition, no smoking, take precautionary measures against static discharge. Keep away from food, drink and animal feeding stuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately. Avoid contact with the skin and the eyes. Do not breathe vapours or spray mist.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage area containers: Storage area should be: well ventilated Stock tanks should be banded and consideration should be given to vent system with a water scrubber to dispel fumes. Tanks should be equipped with airflow pipes directed into the base of the bund with a frost-protected seal to contain fumes. Do not store in Stainless steel, metal drums.

Advice on Protection Against fire and explosion: Keep container tightly closed and in well ventilated area. Keep away from heat and direct sunlight. Store this product in a secure area to prevent unauthorised use. Avoid contact with Rubber and various plastics

Further information on storage conditions: Keep tightly closed in a dry and cool place. Keep in well ventilated place.

Advice on common storage: Keep away from food, drink and animal feeding stuffs.

8.0 Exposure controls/ personal protection

8.1 Control parameters

Regulatory Basis	UK. EH40 Workplace Exposure Limits (WELs)
Regulatory List	EH40 WEL
Value Type	None
Value	None

8.2 Exposure controls

Engineering measures
Refer to protective measures listed in sections 7 and 8

Personal protective equipment

Respiratory protection

Advice: Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standards EN149. Use a NIOSH/MSHA or European Standards EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hand Protection

Advice: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation
Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact)
Acid Resistant and solvent Resistant Hand Protection Protective Gloves should be replaced at first signs of wear.

Eye Protection

Advice: Tightly fitting safety goggles - Ensure eye bath is available

Skin and Body Protection**Environmental exposure controls****General advice**

Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities for such cases.

9.0 Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Form	Solid
Colour	White - Yellow
Odour	Amine - like
PH	10.5 (6.7% aq.sol.)
Vapor Pressure	0.003 mbar @ 20C
Vapor Density	No Data
Freezing Point	No Data
Boiling Point	255 -256C / 491 - 492.8F @ 760 mmHg
Melting Point	86-90C / 186.8-194F
Flash Point	145C / 293F
Evaporation Rate	negligible
Water solubility	633 g/L (20C)
Molecular Formula	C3 H4 N2
Molecular Weight	68.08

10.0 Stability and reactivity

This product is stable

10.1 Reactivity**10.2 Chemical stability**

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions**Hazardous reaction:**

None under normal processing

10.4 Conditions to avoid

Incompatible Products, Excess Heat, Avoid Dust Formation

10.5 Incompatible materials**Materials to avoid:**

Strong Oxidizing Agents
Acids
Acid Chlorides
Acid Anhydrides

10.6 Hazardous decomposition products

Carbon Monoxide (CO)
Carbon Dioxide (CO2)
Nitrogen Oxides (NOx)
Hydrogen Cyanide (Hydrocyanic Acid)
Ammonia

11.0 Toxicological Information**11.1 Information on toxicological effects**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
1-Imidazole	220 mg/kg (Rat)		

Inhalation**Remarks**

Inhalation may cause pain in respiratory system, sneezing coughing and difficulty in breathing.

Mutagenic Effects

Not mutagenic in AMES Test

Reproductive Effects

Possible risk of harm to the unborn child

Target Organs

Skin Respiratory system Eyes Gastrointestinal tract (GI)

Other Adverse Effects

see actual entry in RTECS for complete information The toxicological properties have not been fully investigated

Eyes

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

12.0 Ecological Information

**Component
IMIDAZOLE EXTRA PURE**

FRESHWATER ALGAE	130 mg/L EC50 = 72h 82mg/L EC50 = 96h
FRESHWATER FISH	280 mg/L LC50 48h
MICROTOX	=1200 mg/L EC50 pseudomonas putida 17h '= 231 mg/L EC50 photobacterium phosphoreum 30 min
WATER FLEA	341.5mg/L EC50 = 48h

Persistence and Degradability

Readily biodegradable

Bioaccumulative potential

No Data

Component

Log Pow

1- Imidazole	0
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IMIDAZOLE EXTRA PURE

12.2 Ecotoxicity	May cause harm to aquatic organisms
12.3 Mobility	This substance is mobile in soil
12.4 Degradability	This solution is biodegradable
12.5 Bioaccumulation	This substance is soluble in water and has moderate to high volatility
12.6 Other adverse effects	Harmful by inhalation. May cause headache, nausea and drowsiness. May cause adverse effects to the central nervous system. Vapour may be irritant to the respiratory tract.

13.0 Disposal considerations

13.1 Waste treatment methods

Product	Disposal together with normal waste is not allowed. Special disposal required to local regulations. Do not let product enter drains. Contact waste disposal services.
Contaminated Packaging	Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. Packagings that cannot be cleaned are to be disposed of in the same manner as the product.
European Waste Catalogue Number	No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

14.0 Transport information

14.1 UN number	2923
14.2	
Hazard Class	8
Subsidiary Hazard Class	6.1
Packing Group	III
Proper Shipping Name	Corrosive solid, toxic, N.o.s
14.3 Transport hazard class(es)	
ADR-Class	8
Subsidiary Hazard Class	6.1
(labels; Classification Code; Hazard Identification No; Tunnel restriction code)	III
Proper Shipping Name	Corrosive solid, toxic, N.o.s
IATA	
UN Number	2923
Hazard Class	8
Subsidiary Hazard Class	6.1
Packing Group	III
Proper Shipping Name	Corrosive solid, toxic, N.o.s

15.0 Regulatory Information

Component IMIDAZOLE EXTRA PURE

EINECS	206-019-2
ELINCS	-
NLP	
TSCA	X
DSL	X
NDSL	-
PICCS	X
ENCS	X
CHINA	X
AICS	X
KECL	KE-20937 X

TSCA	United States Toxic Substance Control Act 8 (b) Inventory
EINECS/ELINCS	European Inventory Lists
DSL/NDSL	Canadian Domestic Substances list/ Non-Domestic Substance list
PICCS	Philippines Inventory of chemicals and chemical substances
ENCS	Japan Existing and New chemical substances

CHINA	China Inventory of existing chemical substances
AICS	Inventory of chemical substances
KECL	Existing and evaluated chemical substances

16.0 Other information

Full text of R-Phrases referred to under section 2 and 3

R22	Harmful if swallowed
R63	Possible risk to the unborn child
R34	Causes Burns

Full text of H-Statements referred to under section 2 and 3

H314	Causes severe skin burns and eye damage
H302	Harmful if swallowed
H318	Causes serious eye damage
H361d	Suspected of damaging the unborn child

Full text of Safety Phrases

S7	Keep container tightly closed
S16	Keep away from sources of ignition- No smoking
S24/25	Avoid contact with skin and eyes
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37	Wear suitable protective clothing and gloves
S62	If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label

Other information

This information is based upon Solumetrics Ltd Knowledge of this product at the time this Safety Data Sheet was prepared. It is given in good faith and no warranty is implied. The information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The user must satisfy him/her self as to the purpose this product is put to and the possible change in classification should this product be mixed or formulated with other compounds