

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier

Product Name	4-(2-Chloroethyl)morpholine hydrochloride
Synonyms	2-Morpholinoethyl chloridehydrochloride
Chemical Name	2-Morpholinoethyl chloridehydrochloride
Chemical Formula	C6H13Cl2NO
Product code	FP C033
CAS No.	3647-69-6
EC No.	222-881-2
REACH Registration No.	01-2120228817-49-xxxx

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

Identified Use(s)	Not known.
Uses Advised Against	Not known.

### 1.3 Details of the supplier of the safety data sheet

Manufacturer	
Company Identification	Syntor Fine Chemicals Ltd
Address of Manufacturer	Unit11 Boleyn Court Manor Park Runcorn Cheshire
Postal code	WA7 1SR
Telephone:	+441928579865
Fax	+441928579734
E-mail	neil.davies@syntor.co.uk
Office hours	09:00 - 17:00
Supplier	
Company Identification	Syntor Fine Chemicals Ltd
Address of Supplier	Unit11 Boleyn Court Manor Park Runcorn Cheshire
Postal code	WA7 1SR
Telephone:	+441928579865
Fax	+441928579734
E-mail	neil.davies@syntor.co.uk
Office hours	09:00 - 17:00

### 1.4 Emergency telephone number

Emergency Phone No.	+441928579865
Contact	Neil Davies

### 1.4 Emergency telephone number

Emergency Phone No.	+91 73834 34444
Contact	Gunjan Kothia

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

Regulation (EC) No. 1272/2008 (CLP)	Acute Tox. 3 :Toxic if swallowed. Acute Tox. 4 :Harmful in contact with skin.
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Skin Corr. 1C :Causes severe skin burns and eye damage.  
Skin Sens. 1 :May cause an allergic skin reaction.  
Eye Dam. 1 :Causes serious eye damage.  
Aquatic Chronic 3 :Harmful to aquatic life with long lasting effects.

## 2.2 Label elements

According to Regulation (EC) No. 1272/2008 (CLP)

Product Name

4-(2-Chloroethyl)morpholine hydrochloride

Hazard Pictogram(s)



GHS06



GHS05

Signal Word(s)

Danger

Hazard Statement(s)

H301: Toxic if swallowed.  
H312: Harmful in contact with skin.  
H314: Causes severe skin burns and eye damage.  
H317: May cause an allergic skin reaction.  
H412: Harmful to aquatic life with long lasting effects.

Precautionary Statement(s)

P260: Do not breathe dust/fume/gas/mist/vapours/spray.  
P264: Wash hands and exposed skin thoroughly after handling.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.  
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310: Immediately call a POISON CENTER/doctor.

## 2.3 Other hazards

None known.

## 2.4 Additional Information

For full text of H/P Statements see section 16.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

HAZARDOUS INGREDIENT(S)	CAS No.	EC No. / REACH Registration No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
4-(2-chloroethyl)morpholinium chloride	3647-69-6	222-881-2	100	Acute Tox. 3 H301 Acute Tox. 4 H312 Skin Corr. 1C H314 Skin Sens. 1 H317 Aquatic Chronic 3 H412	GHS06 GHS05 GHS07

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### 3.2 Mixtures

Not applicable.

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

Inhalation	Immediately call a POISON CENTER/doctor.
Skin Contact	Take off immediately all contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see Medical Advice on this label). Rinse skin with water. Immediately call a POISON CENTER/doctor.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
Ingestion	Rinse mouth. Do NOT induce vomiting. Specific treatment (see Medical Advice on this label). Immediately call a POISON CENTER/doctor.

### 4.2 Most important symptoms and effects, both acute and delayed

Causes burns. Allergic contact dermatitis.

### 4.3 Indication of any immediate medical attention and special treatment needed

Specific treatment (see Medical Advice on this label). Immediately call a POISON CENTER/doctor. Treat symptomatically.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1 Extinguishing media

Suitable Extinguishing media	As appropriate for surrounding fire.
Unsuitable extinguishing media	None.

### 5.2 Special hazards arising from the substance or mixture

May decompose in a fire, giving off toxic and irritant vapours.

### 5.3 Advice for firefighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Dike fire control water for later disposal.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Avoid dust generation. Do not breathe dust. Wear suitable protective clothing, gloves and eye/face protection.

### 6.2 Environmental precautions

Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

### 6.3 Methods and material for containment and cleaning up

Sweep up spilled substance and remove to safe place. Use vacuum equipment for collecting spilt materials, where practicable. Contain spillages with sand, earth or any suitable adsorbent material. Earth may be shovelled to contain spillage and to avoid contamination of sewers and watercourses.

### 6.4 Reference to other sections

See Also Section 8, 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Wash hands and exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapours/spray.

### 7.2 Conditions for safe storage, including any incompatibilities

Store locked up.

Storage temperature

Ambient.

Storage life

Stable under normal conditions.

Incompatible materials

None known.

### 7.3 Specific end use(s)

Not known.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

8.1.1 Occupational Exposure Limits

No Occupational Exposure Limit assigned.

### 8.2 Exposure controls

8.2.1. Appropriate engineering controls

Use with ventilation, local exhaust ventilation or breathing protection. A washing facility/water for eye and skin cleaning purposes should be present.

8.2.2. Personal protection equipment



Eye Protection

Wear eye protection with side protection (EN166).



Skin protection

Wear protective clothing and gloves: Impervious gloves (EN 374).



Respiratory protection

A suitable dust mask or dust respirator with filter type P (EN143 or EN405) may be appropriate.



Thermal hazards

None known.

8.2.3. Environmental Exposure Controls

Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance

Solid.

Colour : White to pale brown solid

Odour

Not known.

Odour threshold

Not known.

pH

4.0 - 5.0 @ 10g/l @ 20°C

Melting point/freezing point

180 – 185 °C

Initial boiling point and boiling range

Not applicable.

Flash Point

Not applicable.

Evaporation rate

Not known.

Flammability (solid, gas)	Not known.
Upper/lower flammability or explosive limits	Not known.
Vapour pressure	Not known.
Vapour density	Not known.
Density (g/ml)	Not known.
Relative density	Not known.
Solubility(ies)	Solubility (Water) : Not known. Solubility (Other) : Not known.
Partition coefficient: n-octanol/water	Not known.
Auto-ignition temperature	Not known.
Decomposition Temperature (°C)	Not known.
Viscosity	Not known.
Explosive properties	Not known.
Oxidising properties	Not known.
<b>9.2 Other information</b>	None.

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity

None anticipated.

### 10.2 Chemical Stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

No hazardous reactions known if used for its intended purpose.

### 10.4 Conditions to avoid

None anticipated.

### 10.5 Incompatible materials

Not known.

### 10.6 Hazardous decomposition products

No hazardous decomposition products known.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Acute toxicity - Ingestion	Toxic if swallowed.
Acute toxicity - Skin Contact	Harmful in contact with skin.
Acute toxicity - Inhalation	Not classified.
Skin corrosion/irritation	Causes severe skin burns and eye damage.
Serious eye damage/irritation	Causes serious eye damage.
Skin sensitization data	May cause an allergic skin reaction.
Respiratory sensitization data	Not classified.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.
Reproductive toxicity	Not classified.
Lactation	Not classified.
STOT - single exposure	Not classified.
STOT - repeated exposure	Not classified.
Aspiration hazard	Not classified.

### 11.2 Other information

Not known.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

Harmful to aquatic life with long lasting effects.

Toxicity - Aquatic invertebrates	Not known.
Toxicity - Fish	Not known.
Toxicity - Algae	Not known.
Toxicity - Sediment Compartment	Not classified.
Toxicity - Terrestrial Compartment	Not classified.

### 12.2 Persistence and Degradation

Not known.

### 12.3 Bioaccumulative potential

Not known.

### 12.4 Mobility in soil

Not known.

### 12.5 Results of PBT and vPvB assessment

Not known.

### 12.6 Other adverse effects

Not known.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Dispose of contents in accordance with local, state or national legislation. Send to a licensed recycler, reclaimer or incinerator. Dispose of this material and its container to hazardous or special waste collection point. Dispose at suitable refuse site.

### 13.2 Additional Information

Disposal should be in accordance with local, state or national legislation.

## SECTION 14: TRANSPORT INFORMATION

### 14.1 UN number

UN No. 2923

### 14.2 UN proper shipping name

UN proper shipping name CORROSIVE SOLID, TOXIC, N.O.S.

### 14.3 Transport hazard class(es)

ADR/RID

ADR/RID Class	8
ADR Classification Code	CT2
Special Provisions	274
Limited Quantities	5 kg
Excepted Quantities	E1
Emergency Action Code	2X
Mixed Packing Instructions for Packages	P002 IBC08 R001
Special Packing Provisions for Packages	B3
Mixed Packing Instructions for Packages	MP10
Packing Instructions for Portable Tanks	T1

Special Provisions for Portable Tanks	TP33
Tank Code for Tanks	SGAV L4BN
Special Provisions for Tanks	
Vehicle for Tank Carriage	AT
ADR Transport Category	3
Tunnel Restriction Code	E
Special Provisions for Carriage - Packages	
Special Provisions for Carriage - Bulk	VC1 VC2 AP7
Special Provisions for Carriage - Loading, Unloading and Handling	CV13 CV28
Special Provisions for Carriage - Operation	
ADR HIN	86
IMDG	
IMDG Class	8
Special Provisions	274
Limited Quantities	5 kg
Excepted Quantities	E1
Mixed Packing Instructions for Packages	P002 IBC08 R001
Special Packing Provisions for Packages	B3
Packing Instructions for Portable Tanks	T1
Special Provisions for Portable Tanks	TP33
IMDG EMS	F-A, S-B
Stowage and Handling	Category B SW2
Segregation	
Marine Pollutant	
ICAO/IATA	
IATA Proper Shipping Name	CORROSIVE SOLID, TOXIC, N.O.S.
Excepted Quantities	E1
Passenger and Cargo Aircraft Limited Quantities Packing Instructions	Y845
Passenger and Cargo Aircraft Limited Quantities Max net Qty	5Kg
Passenger and Cargo Aircraft Packing Instructions	860
Passenger and Cargo Aircraft Max net Qty	25Kg
Cargo Aircraft Packing Instructions	864
Cargo Aircraft Max net Qty	100Kg
Special Provisions	A3, A803
Emergency Response Guidebook (ERG) Code	8P
Labels	
Labels	8 +6.1



**14.4 Packing group**

Packing group III

**14.5 Environmental hazards**

Environmental hazards Not classified as a Marine Pollutant.

**14.6 Special precautions for user**

Special precautions for user Not known.

**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

No information available

**SECTION 15: REGULATORY INFORMATION**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

European Regulations - Authorisations and/or Restrictions On Use

Candidate List of Substances of Very High Concern for Authorisation Not listed

REACH: ANNEX XIV list of substances subject to authorisation Not listed

REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Not listed

Community Rolling Action Plan (CoRAP) Regulation (EC) N° 850/2004 of the European Parliament and of the Council on persistent organic pollutants Not listed

Regulation (EC) N° 1005/2009 on substances that deplete the ozone layer Not listed

Regulation (EU) N° 649/2012 of the European Parliament and of the Council concerning the export and import of hazardous chemicals Not listed

**National regulations**

Other

Not known.

**15.2 Chemical Safety Assessment**

A REACH chemical safety assessment has not been carried out.

**SECTION 16: OTHER INFORMATION**

The following sections contain revisions or new statements:

**LEGEND**

Hazard Pictogram(s)



GHS06



GHS05

GHS07: GHS: Exclamation mark

Hazard classification

Acute Tox. 3 : Acute toxicity, Category 3

Acute Tox. 4 : Acute toxicity, Category 4

Skin Corr. 1C : Skin corrosion/irritation, Category 1C

Skin Sens. 1 : Skin sensitization, Category 1



Eye Dam. 1 : Serious eye damage/irritation, Category 1

Aquatic Chronic 3 : Hazardous to the aquatic environment, Chronic, Category 3

Hazard Statement(s)

H301: Toxic if swallowed.  
H312: Harmful in contact with skin.  
H314: Causes severe skin burns and eye damage.  
H317: May cause an allergic skin reaction.  
H318: Causes serious eye damage.  
H412: Harmful to aquatic life with long lasting effects.

Precautionary Statement(s)

P260: Do not breathe dust/fume/gas/mist/vapours/spray.  
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.  
P264: Wash hands and exposed skin thoroughly after handling.  
P270: Do not eat, drink or smoke when using this product.  
P272: Contaminated work clothing should not be allowed out of the workplace.  
P273: Avoid release to the environment.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.  
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P302+P352: IF ON SKIN: Wash with plenty of water.  
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310: Immediately call a POISON CENTER/doctor.  
P312: Call a POISON CENTER/doctor if you feel unwell.  
P321: Specific treatment (see Medical Advice on this label).  
P330: Rinse mouth.  
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.  
P362+P364: Take off contaminated clothing and wash it before reuse.  
P363: Wash contaminated clothing before reuse.  
P405: Store locked up.  
P501: Dispose of contents in accordance with local, state or national legislation.

Acronyms

ADN : European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road  
CAS : Chemical Abstracts Service  
CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures  
DNEL : Derived No Effect Level  
EC : European Community  
EINECS : European Inventory of Existing Commercial Chemical Substances  
IATA : International Air Transport Association

IBC : Intermediate Bulk Container  
 ICAO : International Civil Aviation Organization  
 IMDG : International Maritime Dangerous Goods  
 LTEL : Long term exposure limit  
 PBT : Persistent, Bioaccumulative and Toxic  
 PNEC : Predicted No Effect Concentration  
 REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals  
 RID : Regulations concerning the International Carriage of Dangerous Goods by Rail  
 STEL : Short term exposure limit  
 STOT : Specific Target Organ Toxicity  
 UN : United Nations  
 vPvB : very Persistent and very Bioaccumulative

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