

Syntor Fine Chemicals Ltd

Material Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE PREPARATION AND COMPANY

1.1 Product identifier: Synonyms:	Bis(2-chloroethyl)amine hydrochloride 2,2'-dichlorodiethylamine hydrochloride	
Recommended uses: Uses advised against	Intermediate in chemical manufacture No information available	
1.3 Detail of supplier:	Syntor Fine Chemicals Ltd 11 Boleyn Court Manor Park Runcorn WA7 1SR	1.4 Emergency Telephone: +44 (0) 7720 149 777 Fax: +44 (0) 1928 579 734 e-mail: mr@syntor.co.uk www.syntor.co.uk

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance:
Classification of substance according to CLP, 1272/2008/EC:

2.2 Label element:



GHS06 skull and crossbones
H331 Toxic if inhaled.



GHS08 health hazard
H340 May cause genetic defects
H350 May cause cancer



GHS05 corrosion
H314 Causes severe skin burns and eye damage

Signal word:

Danger

Hazard Statements:

H302 Harmful if swallowed
H331 Toxic if inhaled.
H314 Causes severe skin burns and eye damage
H340 May cause genetic defects
H350 May cause cancer

Precautionary Statements:

P260 Do not breath dust/fume/gas/mist/vapours/spray
P303 + P361 + P353 – IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water / shower.
P 305 + 351 + 338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P301 +P330 + P331 – IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P405 Store locked up
P501: Dispose of contents/container in accordance with local/regional/national/international regulation

2.3 Other Hazards:
Results of PBT and vPvB assessment
PBT:
vPvB:

Not applicable
Not applicable

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances:

Ingredient	CAS Number	EC Number	Concentration (w/w)	Classification according to (EC) No 1272/2008 (CLP)
Bis(2-chloroethyl)amine hydrochloride	821-48-7	212-479-5	~ 100 %	Acute Tox. 4 H302 Harmful if swallowed Acute Tox. 3 H331 Toxic if inhaled. Skin Corr 1B, H314 Causes severe skin burns and eye damage Muta. 1B H340 May cause genetic defects Carc. 1B H350 May cause cancer

Molecular formula: C₄H₉C₁₂N · HCl
Molecular weight: 178.49 g/mol

4. FIRST AID MEASURES

4.1 Description of first aid measures:

General information: Instantly remove any clothing soiled by the product.
Remove breathing apparatus only after soiled clothing has been completely removed.

Inhalation: Supply fresh air. If required, provide artificial respiration. Do not use mouth-to-mouth

resuscitation if victim ingested or inhaled the substance. Keep patient warm. Consult doctor if symptoms persist.
Skin contact: Instantly wash with water and soap and rinse thoroughly. Seek immediate medical advice.
Eye contact: Rinse opened eye for several minutes under running water. Then consult doctor.
Swallowing: Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek immediate medical advice.

4.2 Most important symptoms and effects, both acute and delayed: No further relevant information available.

4.3 Indication of immediate medical attention and special treatment needed: No further relevant information available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media:
Suitable extinguishing agents: Use carbon dioxide, extinguishing powder or water jet. Fight larger fires with water jet or alcohol resistant foam

For safety reasons unsuitable extinguishing media: No information

5.2 Special hazards caused by the material, its products of combustion or flue gases: Can be released in case of fire. Carbon monoxide and carbon dioxide. Nitrogen oxides (NO_x), Hydrogen chloride (HCL), Possible Hydrogen cyanide (HCN)

5.3 Precautions for fire fighters: Wear self-contained breathing apparatus.
Wear full protective suit.

5.4 Further information: Use water spray to cool un opened containers

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures: Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.

6.2 Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Discharge into the environment must be avoided. Do not allow material to be released to the environment without proper governmental permits

6.3 Methods and materials for containment and cleaning up: Contain spillage. Avoid dust formation. Sweep and shovel and place in container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections: Dispose of contaminated material according to local / national regulations.
See section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling: Avoid exposure - obtain special instructions before use. Keep containers tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation/exhaustion at the workplace.
Open and handle container with care.

7.2 Conditions for safe storage, including any incompatibilities: Keep ignition sources away – Do not smoke.
Store in cool location. Store away from oxidising agents and strong bases.
Keep container tightly sealed.
Store in locked cabinet or with access restricted to technical experts or their assistants

7.3 Specific use(s) No further relevant information available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters:
Derived No Effect Level(DNEL): No information available
Predicted No Effect Concentration (PNEL): No information available

8.2 Exposure controls:
Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Personal protective equipment:
General protective and hygienic measures: The usual precautionary measures should be adhered to in handling the chemicals. Keep away from foodstuffs, beverages and food. Instantly remove any soiled and impregnated garments. Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.

Breathing equipment: Use breathing protection with high concentrations.
Protection of hands: Protective gloves
Eye protection: Tightly sealed safety glasses / full face protection
Body protection: Protective work clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance Form:	White to beige powder
b) Odour:	Not determined
c) Odour Threshold:	No information available
d) pH	No information available
e) Melting/freezing point Melting point/range:	211 – 215°C
f) Initial boiling point and boiling range	No information available
g) Flash point:	No information available
h) Flammability:	No information available
j) Upper/lower flammability or explosive limits:	No information available
k) Vapour pressure 2:	No information available
l) Vapour density:	No information available
m) Relative density:	No information available
n) Water solubility:	Soluble
o) Partition coefficient:	No information available
p) Autoignition temperature:	No information available
q) Decomposition temperature:	No information available
r) Viscosity:	No information available
s) Explosive properties:	No information available
t) Oxidizing properties:	No information available
9.2 Other information:	No information available

10. STABILITY AND REACTIVITY

10.1 Reactivity:	No decomposition if used and stored according to specification
10.2 Chemical stability:	Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions:	No information available
10.4 Conditions to avoid:	Incompatible materials
10.5 Incompatible materials:	Oxidizing agent, strong bases
10.6 Hazardous decomposition products:	Carbon dioxide, carbon monoxide, Hydrogen chloride (HCl) Nitrogen oxides (NO _x), Possibly hydrogen cyanide (HCN)

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:	
LD/LC50 values that are relevant for classification:	Oral LD50 1150 mg/kg (rat) Inhalation LCLo/10M 1000 mg/m ³ (mouse)
Effect on the skin:	Corrosive effect on skin and mucous membranes
Effect on the eye:	Strong corrosive effect Lachrymatory effect
If swallowed:	Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of oesophagus and stomach.
Sensitisation:	No sensitization effect known
Additional toxicological information	The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for this substance. Reproductive effects have been observed on tests with laboratory animals. Mutagenic effects have been observed on tests with bacteria. To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. No classification data or carcinogenic properties of this material is available

12. ECOLOGICAL INFORMATION

12.1 Toxicity	
Aquatic toxicity:	No further relevant information available
12.2 Persistence and degradability:	No further relevant information available
12.3 Bioaccumulative potential:	No further relevant information available
12.4 Mobility in soil:	No further relevant information available
12.5 Results of PBT and vPvB assessment:	No further relevant information available
12.6 Other adverse effects	No further relevant information available

Additional ecological information:

General notes:

Hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system. Do not allow material to be released to the environment without proper governmental permits.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment method

Substance disposal:

Handover to disposers of hazardous waste.
Must be specially treated under adherence to official regulations.
Consult state, local or national regulations for proper disposal.
Arrange disposal as special waste, by licensed disposal company.

Waste packaging:

Dispose of as unused product.

14. TRANSPORT INFORMATION

Land transport ADR/RID e GGVS/GGVE (cross-border/domestic)



ADR/RID-GGVS/E Class:

8 (CT2) Corrosive substances

Kemler Number:

86

UN No:

2923

Packaging group:

II

Label:

8 + 6.1

Designation of goods:

2923 CORROSIVE SOLID, TOXIC.N.O.S. (Bis(2-chloroethyl)amine hydrochloride)

Maritime transport IMDG/GGVSea:



IMDG/GGVSea Class:

8

UN No:

2923

Label:

8 + 6.1

Packaging group:

II

Correct technical name:

CORROSIVE SOLID, TOXIC.N.O.S. (Bis(2-chloroethyl)amine hydrochloride)

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class:

8

UN/ID No:

2923

Label:

6.1 + 3

Packaging group:

II

Designation of goods:

CORROSIVE SOLID, TOXIC.N.O.S. (Bis(2-chloroethyl)amine hydrochloride)

15. REGULATORY INFORMATION

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006

Additional information:

For use by technically qualified individuals

15.2 Chemical Safety Assessment:

No data available

16. OTHER INFORMATION

Revision Summary:

The issue replaces revision 005. The safety data sheet has been updated to align the precautionary phrases with those assigned during REACH registration. There is no change to the classification of the substance.

The above Information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Syntor Fine Chemicals Ltd, shall not be held liable for any damage resulting from handling or from contact with the above product.

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