

Syntor Fine Chemicals Ltd

Material Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE PREPARATION AND COMPANY

1.1 Product identifier:	2-(Diethylamino)ethyl chloride hydrochloride
Synonyms:	1-chloro-2-(diethylamine)ethanehydrochloride
REACH Note>	This substance has been registered as a transported isolated intermediate and to the best of our knowledge the acute and chronic toxicity of this substance is not fully known. REACH reference number: 01-2119989645-17-0000
Recommended uses:	Intermediate in chemical manufacture
Uses advised against	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:

- 3.1 Cat 2 H301 Toxic if swallowed
- 3.2 Cat 1 H314 Causes severe skin burns and eye damage
- 3.3 Cat 1 H318 Causes serious eye damage
- 3.5 Cat 2 H341 Suspected of causing genetic defects

2.2 Label element:



Signal word:

Danger

Hazard / Precautionary Statements:

H301 Toxic if swallowed
H314 Causes severe skin burns and eye damage
H318 Causes serious eye damage
H341 Suspected of causing genetic defects
P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P 301 + 310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P303 + 340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P308 IF exposed or concerned:
P310 Immediately call a POISON CENTER or doctor/physician.

2.3 Other Hazards: Results of PBT and vPvB assessment

PBT: Not applicable
vPvB: Not applicable

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances:

Ingredient	CAS Number	EC Number	(% w/w)	Classification according to (EC) No 1272/2008 (CLP)
2-(Diethylamino)ethyl chloride hydrochloride	869-24-9	212-786-4	~ 100 %	3.1 Cat 2 H301 Toxic if swallowed 3.2 Cat 1 H314 Causes severe skin burns and eye damage 3.3 Cat 1 H318 Causes serious eye damage 3.5 Cat 2 H341 Suspected of causing genetic defects

Molecular formula: C₆H₁₄ClN
Molecular weight: 172.10

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, sand or extinguishing powder or water jet. For larger fire use water jet or alcohol resistant foam.

For safety reasons unsuitable extinguishing media: None

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 (NOx), Hydrogen Chloride (HCl)

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

5.4 Further information: Use water spray to cool unopened 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 / prevent further spillage. Avoid dust formation. Wear protective clothing. Sweep or vacuum 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 oxidizing agents. This product is hygroscopic. Keep container tightly sealed. Protect from humidity and keep away from water

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.

Breathing equipment:	Avoid contact with the eyes and skin. 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:	Powder, white to tan colour
b) Odour:	Not determined
c) Odour Threshold:	No information available
d) pH	4 – 4.5 (of a 60% aqueous solution)
e) Melting point/range:	208-212°C
f) Boiling range:	No information available
g) Flash point:	Not applicable aqueous solution
h) Flammability:	No information available
j) Upper/lower flammability or explosive limits:	No information available
k) Vapour pressure:	No information available
l) Vapour density:	No information available
m) Relative density:	No information available
n) Water solubility:	Fully miscible (2000 g/l at 20°C)
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 relevant information available

10. STABILITY AND REACTIVITY

10.1 Reactivity:	No decomposition if used and stored according to specifications.
10.2 Chemical stability:	Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions:	No dangerous reactions known
10.4 Conditions to avoid:	Incompatible materials
10.5 Incompatible materials:	Strong oxidizing agent
10.6 Hazardous decomposition products:	Can be release in the event of fire: Carbon dioxide, carbon monoxide, Nitrogen Oxides (NOx), Hydrogen Chloride (HCl)

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:	Oral LD50 – 25 to 200 mg/kg (rat) Corrosive to skin (rbt) Corrosive to eys (rbt)
Primary irritant effect:	
Effect on the skin:	Corrosive effect on skin and mucous membranes.
Effect on the eye:	Corrosive with the danger of severe eye injury.
If swallowed:	Toxic if swallowed.
Sensitisation:	No sensitising effect known.
Additional toxicological information	Mutagenic effects have been observed on test 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:	Water hazard class 2. 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:	6.1 Toxic Substance
Kemler Number:	68
UN No:	2928
Packaging group:	II
Label:	6.1 / 8
Designation of goods:	2928 Toxic solid, corrosive, organic, N.O.S (2-(Diethylamino)ethyl chloride hydrochloride)

Maritime transport IMDG/GGVSea:



IMDG/GGVSea Class:	6.1
UN No:	2928
Label:	6.1 / 8
Packaging group:	II
Correct technical name:	Toxic solid, corrosive, organic, N.O.S (2-(Diethylamino)ethyl chloride hydrochloride)

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class:	6.1
UN/ID No:	2928
Label:	6.1 / 8
Packaging group:	II
Designation of goods:	Toxic solid, corrosive, organic, N.O.S (2-(Diethylamino)ethyl chloride hydrochloride)

15. REGULATORY INFORMATION

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

The substance, 2-Diethylaminoethyl chloride hydrochloride has been registered as a transported isolated intermediate in accordance with Regulation EC No. 1907/2006 (REACH). REACH reference number: 01-2119989645-17-0000
If you have any comments with respect to the classification and labeling of this substance please contact the lead registrant Syntor Fine Chemicals at the address detailed in section 1.

This product is subject to the International Chemical Weapons Convention.
In the United Kingdom the product is subject to the Chemical Weapons act 1996.

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

Classification of substance according to CLP, 1272/2008/EC:
Complete list of associated precautionary phrases:

P264 Wash thoroughly after handling
P270 Do not eat, drink or smoke when handling this product
P301 + 310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P321 Specific treatment (see on this label)
P 330 Rinse mouth
P406 Store locked up
P501 Dispose of contents / container in accordance with national regulations
P260 Do not breath dust or mist
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301 + 330 + 331 IF SWALLOWED Rinse mouth. Do NOT induce vomiting
P303 + 361 + 353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + 340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P310 Immediately call a POISON CENTRE or doctor/ physician
P305 + 351 + 338 IF IN EYES Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P201 Obtain special instruction before use
P202 Do not handle until all safety precautions have been read and understood.
P281 Use personal protective equipment as required

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this substance.

16. OTHER INFORMATION

Revision Summary: This issue replaces revision 007. The safety data sheet has been updated to remove reference to the dangerous substances directive 67/548/EEC. There is no change to the classification and labelling 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.

Disclaimer: For R&D use only. Not for drug, household or other uses.

We welcome any additional information about our products that customers have obtained by personal experience.

