

Syntor Fine Chemicals Ltd

Material Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE PREPARATION AND COMPANY

1.1 Product identifier:	2-Diisopropylaminoethyl chloride hydrochloride solution
Synonyms:	[N-(2-Chloroethyl)diisopropylamine hydrochloride]
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 substances according to 67/548/EEC:



T+ Very toxic

R26 Very Toxic by inhalation
R24/25 Toxic in contact with skin and if swallowed
R37/38 Irritating to respiratory system and skin
R41 Risk of serious damage to eyes

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

3.1 Cat 3 H301 Toxic if swallowed
3.1 Cat 2 H310 Fatal in contact with skin
3.1 Cat 1 H330 Fatal if inhaled.
3.3 Cat 1 H318 Causes serious eye damage
3.2 Cat 2 H315 Causes skin irritation
3.8 Cat 3 H335 May cause respiratory irritation

2.2 Label element:



Signal word:

Danger

Hazard / Precautionary Statements:

H301 Toxic if swallowed
H310 Fatal in contact with skin
H330 Fatal if inhaled
H318 Causes serious eye damage
H 315 Causes skin irritation
H315 Causes skin irritation
H335 May cause respiratory irritation
P 261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P304 + 340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P 301/310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
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

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 name:	2-Diisopropylaminoethyl chloride hydrochloride 50% water solution
CAS No.:	4261-68-1
EINECS No:	224-238-1
Molecular formula:	C ₈ H ₁₈ ClN.HCl
Molecular weight:	200.15

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 spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) 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.
Keep container tightly sealed.

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:	Colourless to light-yellow liquid
b) Odour:	Not determined
c) Odour Threshold:	No information available
d) pH	4 – 4.5
e) Melting point/range:	No information available
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:	1.09 g/cm ³
n) Water solubility:	Fully 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 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:	Oxidizing agent
10.6 Hazardous decomposition products:	Carbon dioxide, carbon monoxide, Nitrogen Oxides (NOx), Hydrogen Chloride (HCl)

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity::	Oral LD50 – 96 mg/kg (rat) Dermal LD50 – 197 mg/kg (rab) Inhalation LD50/4H - 12 mg/3/4H(rat)
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Primary irritant effect::

Effect on the skin: Irritant effect on skin and mucous membranes.

Effect on the eye: Strong caustic effect.

If swallowed: Toxic if swallowed. Swallowing will lead to a strong caustic effect on throat and to the danger of perforation of oesophagus and stomach

Sensitisation: No sensitising effect known.

Additional toxicological information 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: Water hazard class 1. Slightly hazardous for water.

General notes: 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.

Waste packaging: Arrange disposal as special waste, by licensed disposal company.
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: 66
UN No: 2810
Packaging group: I
Label: 6
Designation of goods: 2810 TOXIC LIQUID, ORGANIC, N.O.S. (2-Diisopropylaminoethyl chloride hydrochloride)

Maritime transport IMDG/GGVSea:



IMDG/GGVSea Class: 6.1
UN No: 2810
Label: 6
Packaging group: I
Correct technical name: TOXIC LIQUID, ORGANIC, N.O.S. (2-Diisopropylaminoethyl chloride hydrochloride)

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: 6.1
UN/ID No: 2810
Label: 6
Packaging group: I
Designation of goods: TOXIC LIQUID, ORGANIC, N.O.S. (2-Diisopropylaminoethyl chloride hydrochloride)

15. REGULATORY INFORMATION

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

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

Designation according to EC guidelines:
Code letter and hazard designation of product:



T+ Very toxic

Risk phrases:

R26 Very Toxic by inhalation
R24/25 Toxic in contact with skin and if swallowed
R37/38 Irritating to respiratory system and skin
R41 Risk of serious damage to eyes

Safety phrases:

S4 Keep away from living quarters
S9 Keep container in a well ventilated place
S 20 When using do not eat or drink
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S27/28 After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

15.2 Chemical Safety Assessment

No data available

16. OTHER INFORMATION

Revision Summary:

The issue replaces revision 002. The safety data sheet has been updated to include the required subheadings in accordance with REACH article 31. 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.



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