

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	DEC 65% solution in water
Trade Name	2-(Diethylamino)ethyl chloride hydrochloride 65% solution in water
Synonyms	1-chloro-2-(diethylamine)ethanehydrochloride 65% solution
Chemical Name	2-chloro-N,N-diethylethanaminium chloride 65% solution in water
Product code	FP D026
CAS No.	Not applicable.
EC No.	Not applicable.
REACH Registration No.	Not known.

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

Identified Use(s)	PC19 Intermediate
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
Postal code	WA7 1SR
Telephone:	+441928579865
Fax	+441928579734
E-mail	colin.lee@syntor.co.uk
Office hours	08:00 - 17:00
Supplier	
Company Identification	Syntor Fine Chemicals Ltd
Address of Supplier	Unit11 Boleyn Court Manor Park
Postal code	WA7 1SR
Telephone:	+441928579865
Fax	+441928579734
E-mail	colin.lee@syntor.co.uk
Office hours	08:00 - 17:00

1.4 Emergency telephone number

Emergency Phone No.	+441928579865
Contact	Colin Lee
National response center	
Address	NHS Direct
Emergency Phone No.	+44 (0) 111

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Regulation (EC) No. 1272/2008 (CLP)	Acute Tox. 2 :Fatal if swallowed. Skin Corr. 1C :Causes severe skin burns and eye damage. Eye Dam. 1 :Causes serious eye damage. Muta. 2 :Suspected of causing genetic defects. Aquatic Chronic 3 :Harmful to aquatic life with long lasting effects.
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2.2 Label elements

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

Product Name DEC 65% solution in water

Hazard Pictogram(s)



GHS06



GHS05



GHS08

Signal Word(s) Danger

Hazard Statement(s)
H300: Fatal if swallowed.
H314: Causes severe skin burns and eye damage.
H341: Suspected of causing genetic defects.
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

Not applicable.

3.2 Mixtures

HAZARDOUS INGREDIENT(S)	CAS No.	EC No. / REACH Registration No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
2-chloroethyldiethylammonium chloride	869-24-9	212-786-4	65	Acute Tox. 2 H300 Skin Corr. 1C H314 Muta. 2 H341 Aquatic Chronic 3 H412	GHS06 GHS05 GHS08
Water	7732-18-5	231-791-2	35	Not classified.	None

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. Rinse skin with water. Wash contaminated clothing before reuse. 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.

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. Ensure full personal protection (including respiratory protection) during removal of spillages.

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

Adsorb spillages onto sand, earth or any suitable adsorbent material. 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. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

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)

PC19 Intermediate

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 mask with filter type A (EN14387 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	Liquid. Colour : Colourless to yellowish liquid.
Odour	Not known.
Odour threshold	Not known.
pH	4-4.5
Melting point/freezing point	Not known.
Initial boiling point and boiling range	~115 °C
Flash Point	Not known.
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	1.12 g/cm ³
Solubility(ies)	Solubility (Water) : Fully miscible 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.

9.2 Other information

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	Calculation method : Fatal if swallowed. Calculation method : Calculated acute toxicity estimate (ATE) Calc ATE - 7.69000
Acute toxicity - Skin Contact	Not classified.
Acute toxicity - Inhalation	Not classified.
Skin corrosion/irritation	Calculation method : Causes severe skin burns and eye damage.
Serious eye damage/irritation	Calculation method : Causes serious eye damage.
Skin sensitization data	Not classified.
Respiratory sensitization data	Not classified.
Germ cell mutagenicity	Calculation method : Suspected of causing genetic defects.
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. 2927

14.2 UN proper shipping name

UN proper shipping name TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.

14.3 Transport hazard class(es)

ADR/RID

ADR/RID Class 6.1
ADR Classification Code TC1
Special Provisions 274
Limited Quantities 100 ml
Excepted Quantities E4
Emergency Action Code 2X
Mixed Packing Instructions for Packages P001 IBC02
Special Packing Provisions for Packages
Mixed Packing Instructions for Packages MP15
Packing Instructions for Portable Tanks T11
Special Provisions for Portable Tanks TP2 TP27
Tank Code for Tanks L4BH
Special Provisions for Tanks TU15 TE19
Vehicle for Tank Carriage AT
ADR Transport Category 2
Tunnel Restriction Code D/E
Special Provisions for Carriage -
Packages
Special Provisions for Carriage - Bulk
Special Provisions for Carriage - Loading, CV13 CV28

Unloading and Handling

Special Provisions for Carriage - Operation	S9 S19
ADR HIN	68
IMDG	
IMDG Class	6.1
Special Provisions	274
Limited Quantities	100 ml
Excepted Quantities	E4
Mixed Packing Instructions for Packages	P001 IBC02
Special Packing Provisions for Packages	
Packing Instructions for Portable Tanks	T11
Special Provisions for Portable Tanks	TP2 TP27
IMDG EMS	F-A, S-B
Stowage and Handling	Category B SW2
Segregation	
Marine Pollutant	
ICAO/IATA	
IATA Proper Shipping Name	TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.
Excepted Quantities	E4
Passenger and Cargo Aircraft Limited Quantities Packing Instructions	Y640
Passenger and Cargo Aircraft Limited Quantities Max net Qty	0.5L
Passenger and Cargo Aircraft Packing Instructions	653
Passenger and Cargo Aircraft Max net Qty	1L
Cargo Aircraft Packing Instructions	660
Cargo Aircraft Max net Qty	30L
Special Provisions	A4, A137
Emergency Response Guidebook (ERG)	6C
Code	
Labels	
Labels	6.1 +8



14.4 Packing group

Packing group II

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 Not listed

High Concern for Authorisation

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



GHS08

GHS06: GHS: skull and crossbones

GHS05: GHS: corrosive

GHS08: GHS: health hazard

Hazard classification

Acute Tox. 2 : Acute toxicity, Category 2

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

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

Muta. 2 : Germ cell mutagenicity, Category 2

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

Hazard Statement(s)

H300: Fatal if swallowed.

H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

H341: Suspected of causing genetic defects.

H412: Harmful to aquatic life with long lasting effects.

Precautionary Statement(s)

P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P260: Do not breathe 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.
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.
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.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P310: Immediately call a POISON CENTER/doctor.
P321: Specific treatment (see Medical Advice on this label).
P330: Rinse mouth.
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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