

1: Identification of substance / mixture

1. Product Identifier

Substance

Product Name **1-(3-Dimethylaminopropyl)-3-ethylcarbodiimide hydrochloride**
Product Code IL-EDC
CAS Number 25952-53-8
Other Names 1-(3-Dimethylaminopropyl)-3-ethylcarbodiimide hydrochloride
3-(3-Dimethylaminopropyl)-1-ethyl-carbodiimide hydrochloride
1-Ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride
N'-(ethylcarbonimidoyl)-N,N-dimethylpropane-1,3-diamine monohydrochloride
IUPAC
MFCD Number MFCD00012503
EC/EINECS 247-361-2
REACH Number Index-No

2. Relevant identified uses of the substance or mixture and uses advised against

Research and Development

3. Details of the supplier of the safety data sheet



ISOMERLAB D.O.O.
TRZASKA CESTA
297A
SI-1000 LJUBLJANA
SLOVENIA

Telephone: +38640764332
Fax:
Email: INFO@ISOMERLAB.COM

4. Emergency telephone number

112

2. Hazards Identification

1. Classification of the substance or mixture

H302	Acute Tox. 4	
H311	Acute Tox. 3	
H315	Skin Irrit. 2	
H317	Skin Sens. 1	
H319	Eye Irrit. 2	
H373	STOT RE 2	
H400	Aquatic Acute 1	
H410	Aquatic Chronic 1	

2. Label elements

Signal Word **Danger**



Hazard Statements

H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H373	May cause damage to organs stomach intestine trachea.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Phrases

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of soap and 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.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P391	Collect spillage.
P501	Dispose of contents/container to in accordance with local regulation

3. Other Hazards

Additional precautionary phrases are located throughout the safety data sheet

3. Composition / Information on Ingredients

1. Substances

Product Name	Hazards	Concentration
EDC hydrochloride		
CAS Number: 25952-53-8 EC/EINECS: 247-361-2	H302, H311, H315, H317, H319, H373, H400, H410 Acute Tox. 3, Acute Tox. 4, Aquatic Acute 1, Aquatic Chronic 1, Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1, STOT RE 2	<=100%

4. First Aid Measures

1. Description of first aid measures

<i>Skin Contact</i>	P302 + P352: IF ON SKIN: Wash with plenty of soap and water. P332 + P313: If skin irritation occurs: Get medical advice/attention. P333 + P313: If skin irritation or rash occurs: Get medical advice/attention.
<i>Eye Contact</i>	P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313: If eye irritation persists: Get medical advice/attention.
<i>Ingestion</i>	P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Wash out mouth with water.
<i>Inhalation</i>	Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious and breathing is OK, place in the recovery position.

2. Most important symptoms and effects

No symptoms.

3. Indication of any immediate medical attention

No additional measures required

5. Firefighting measures

1. Extinguishing Media

<i>Suitable</i>	Carbon dioxide. Dry chemical powder. Water.
<i>Unsuitable</i>	Do not use water with a full water jet

2. Special Hazards arising from the substance or mixture

In combustion toxic fumes may form.

3. Advice for Fire Fighters

Wear protective clothing to prevent contact with skin and eyes.
Wear self-contained breathing apparatus.

6. Accidental Release Measures

1. Personal Precautions

Refer to section 8 of SDS for personal protection details.

2. Environmental Precautions

Do not discharge into drains or rivers.

3. Methods & Materials

P391: Collect spillage.
Mix with sand or vermiculite.
Transfer to a suitable container.

4. Preventing the occurrence of secondary hazards.

No Special Measures Required

7. Handling and Storage

1. Personal Precautions

Safe Handling

Handle in fume hood.
Wash hands immediately after contamination.
P264: Wash hands thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P273: Avoid release to the environment.

Protection against explosions and fires

P272: Contaminated work clothing should not be allowed out of the workplace.
P361: Remove/Take off immediately all contaminated clothing.
P362: Take off contaminated clothing and wash before reuse.
P363: Wash contaminated clothing before reuse.
normal measures for preventive fire protection

2. Conditions for safe storage, including any incompatibilities

Managing Storage Risks

Keep container tightly closed.
Refrigerate.

Storage Controls

No special requirements

Maintaining Integrity

Keep in tightly closed container in cool area away from direct sunlight or heat sources.

Other advice

No further information available.

3. Specific End Uses

The end use(s) have not been fully determined. The substance is supplied for Research and Development purposes by professionals only.

8. Exposure Controls/Personal Protection

1. Control Parameters

No Data Available

2. Exposure Controls

<i>General protective and hygiene measures</i>	P280: Wear protective gloves/protective clothing/eye protection/face protection. The standard precautionary measures should be adhered to when handling Wash hands during breaks and at the end of handling the material Immediately remove any contaminated clothing
<i>Engineering measures</i>	Ensure there is sufficient ventilation of the area.
<i>Eye / Face Protection</i>	Safety Glasses.
<i>Hand protection</i>	Protective gloves.
<i>Respiratory protection</i>	P260: Do not breathe dust/fume/gas/mist/vapours/spray. Respiratory protection not required.
<i>Skin protection</i>	Protective clothing.
<i>Other personal protection advice</i>	no data

9. Physical and Chemical Properties

1. Physical and Chemical Properties

Appearance	Solid
Odour	No Data Available
Odour threshold	No Data Available
PH	7.9 @ 20°C
Melting point / Freezing point	112-120°C
Initial boiling point and boiling range	No Data Available
Flash point	No Data Available
Evaporation rate	No Data Available
Flammability(solid,gas)	No Data Available
Upper/lower flammability or explosive limits	No Data Available
Vapour pressure	0.002 Pa/20°C
Vapour density	No Data Available
Relative density	1.044
Solubility(ies):	Water, Chloroform, Ethanol, Methanol
Partition coefficient: n-octanol/water	-2.98 @ 25°C
Auto-ignition temperature	No Data Available
Decomposition temperature	>125°C
Viscosity	No Data Available
Explosive properties	No Data Available
Oxidising properties	No Data Available

2. Other Information

No additional information available

10. Stability and Reactivity

1. Reactivity

no unusual reactivity

2. Stability

Stable under normal conditions.

3. Possibility of Hazardous Reactions

no hazardous reactions known

4. Conditions to Avoid

Heat and moisture sensitive.

5. Incompatible Materials

Strong oxidizing agents.
Strong acids

6. Hazardous Decomposition Products

In combustion emits toxic fumes.
In combustion emits toxic fumes of carbon dioxide / carbon monoxide.
In combustion emits toxic fumes of nitrogen oxides.
In combustion emits toxic fumes of hydrogen chloride / phosgene.

11. Toxicology information

1. Information

<i>Acute Toxicity</i>	Oral LD50 (rat - female) 500mg/kg Dermal LD50 (rat) >200 - <=1000mg/kg Intravenous LD50 (mouse) 56mg/kg
<i>Skin corrosion/irritation</i>	irritant for skin and mucous membranes
<i>Serious eye Damage/irritation</i>	no adverse effect observed (not irritating)
<i>Respiratory or skin sensitisation</i>	adverse effect observed (sensitising)
<i>Germ Cell mutagenicity</i>	1-(3-dimethylaminopropyl)-3-ethylcarbodiimide hydrochloride (EDAC) was mutagenic in the absence of S9 activation when tested in accordance with regulatory guidelines for the Ames study. The test substance induced toxicologically significant increases in the mutant frequency at the TK +/- locus in Mouse Lymphoma L5178Y cells following four hours exposure and is therefore considered to be mutagenic under the conditions of the test. These increases were observed in the absence and presence of met
<i>Carcinogenicity</i>	not known
<i>Reproductive toxicity</i>	No reproductive or developmental toxicity was observed up to 100 mg/kg.
<i>STOT-single exposure</i>	not known
<i>STOT-repeated exposure</i>	not known
<i>Aspiration hazard</i>	not known

2. Additional

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
No classification data on carcinogenic properties of this material is available from the EPA, IARC,NTP,OSHA or ACGIH

12. Ecological Information

1. Toxicity

LC50 for freshwater fish: 4.6 mg/L

2. Persistence and degradability

not known

3. Bio-Accumulative Potential

not known

4. Mobility and Soil

Log Pow: -2.98 @ 25°C

5. Results of PBT & vPvB assessment

the substance is not PBT / vPvB

6. Other adverse effects

not known

13. Disposal Considerations

1. Waste Treatment Methods

Disposal Operations Consult state, local or national regulations for proper disposal.
Hand over to authorised disposal company as hazardous waste.

Disposal of Packaging Disposal must be made according to official regulations.

14. Transport Information

Air (ICAO)

1. **UN Number:** 2811
2. **Shipping Name:** Toxic solid, organic, n.o.s.
3. **Transport hazard class(es):** : 6.1 Sub Class :



4. **Packing group:** III
5. **Environmental hazards:**
6. **Special Precautions for user:**
7. **Transport in bulk:**

Road (ADR)

1. **UN Number:** 2811
2. **Shipping Name:** TOXIC SOLID, ORGANIC, N.O.S (EDC hydrochloride).
3. **Transport hazard class(es):** : 6 Sub Class :



4. **Packing group:** III
5. **Environmental hazards:**
6. **Special Precautions for user:**
7. **Transport in bulk:**

Sea (IMDG)

1. **UN Number:** 2811
2. **Shipping Name:** Toxic solid, organic, n.o.s.
3. **Transport hazard class(es):** : 6.1 Sub Class :



4. **Packing group:** III
5. **Environmental hazards:**
6. **Special Precautions for user:**
7. **Transport in bulk:** IBCINS: IBC08
IBCPPOV: B3
TANKPROV: TP33

15. Safety, health, environmental and national regulations

1. Safety, health, environmental and national regulations:

product is not subject to any additional regulations or provisions

2. Safety Assessment

No Chemical Safety Assessment

16. Other Information

1. Other Information:

ADR: Accord Europeen sur le transport des marchandises Dangereuses par Route(European Agreement concerning the International Carriage of Dangerous Goods by road)
RID:Reglement International concernant le transport des marchandises dangereuses par chemin de fer (Regulations concerning the International transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the International Air Transport Association
ICAO:International Civil Aviation Organization
ICAO-TI: Technical Instructions by the ICAO
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
CAS:Chemical Abstracts Service

3. Disclaimer

The product listed is for research and development purposes only and not for human or animal use. As such, in most cases, the toxicological, ecological and physicochemical properties have not been fully determined and the product should be treated with respect and always handled under suitable conditions by appropriately qualified personnel. The responsible party shall use this datasheet only in conjunction with other sources of information gathered by them, and should make an independent judgement of suitability, to ensure proper use and protect the health and safety of employees. This information is furnished without warranty and any use of the product not in conformance with this material safety data sheet, or in combination with any other product or process, is the responsibility of the user.