

Safety Data Sheet

EDC-HCL

SECTION 1: Identification**1.1 Product identifier**

Product name	EDC-HCL
Product number	13503
Brand	CovaChem
Substance name	1-[3-(Dimethylamino)propyl]-3-ethyl carbodiimide hydrochloride
EC no.	247-361-2
CAS no.	25952-53-8

1.2 Other means of identification

1-(3-(Dimethylamino)propyl)-3-ethyl-carbodiimide hydrochloride; EDC; EDC-HCl; EDAC; EDAC-HCl; 3-(ethyliminomethyleneamino)-N,N-dimethylpropan-1 amine; N-Ethyl-N'(3-dimethylaminopropyl)carbodiimide hydrochloride; EDC hydrochloride; 1-(3Dimethylaminopropyl)-3-Ethylcarbodiimide HCl

1.3 Recommended use of the chemical and restrictions on use

For laboratory use only. Intended for use as a research laboratory chemical or in the manufacturing of substances.

1.4 Supplier's details

Name	CovaChem, LLC.
Address	6260 East Riverside Blvd Suite 119 Loves Park, IL 61111 United States
Telephone	815-315-1271
Fax	815-315-1272
email	info@covachem.com

1.5 Emergency phone number(s)

PERS Professional Emergency Response Service
Company Code 11814
1-800-633-8253 (U.S. & Canada)
1-801-629-0667 (International)

SECTION 2: Hazard identification**General hazard statement**

H315-Causes Skin Irritation
H318-Causes eye damage
H319-Causes serious eye irritation
H335-May cause respiratory irritation

2.1 Classification of the substance or mixture**GHS classification in accordance with: (US) OSHA (29 CFR 1910.1200)**

- Specific target organ toxicity, single exposure (chapter 3.8), Cat. 3
- Skin corrosion/irritation (chapter 3.2), Cat. 2
- Eye damage/irritation (chapter 3.3), Cat. 2

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2.2 GHS label elements, including precautionary statements

Pictogram



Signal word

Warning

Hazard statement(s)

H315

Causes skin irritation

H318

Causes serious eye damage

H319

Causes serious eye irritation

H335

May cause respiratory irritation

Precautionary statement(s)

P261

Avoid breathing dust/fume/gas/mist/vapors/spray.

P264

Wash skin thoroughly after handling.

P271

Use only outdoors or in a well-ventilated area.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352

IF ON SKIN: Wash with plenty of soap and 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.

P312

Call a POISON CENTER or doctor if you feel unwell.

P332+P313

If skin irritation occurs: Get medical advice/attention.

P337+P313

If eye irritation persists: Get medical advice/attention.

P362+P364

Take off contaminated clothing and wash it before reuse.

P403+P233

Store in a well ventilated place. Keep container tightly closed.

P501

Dispose of contents/container in accordance with local, state, federal and international regulations.

2.3 Other hazards which do not result in classification

None

SECTION 3: Composition/information on ingredients

3.1 Substances

Substance name

1-[3-(Dimethylamino)propyl]-3-ethyl carbodiimide hydrochloride

EC no.

247-361-2

CAS no.

25952-53-8

Formula

C₈H₁₇N₃ HCl

Molecular weight

191.71

Other names / synonyms

1-(3-(Dimethylamino)propyl)-3-ethyl-carbodiimide hydrochloride; EDC; EDC-HCl; EDAC; EDAC-HCl; 3-(ethyliminomethyleneamino)-N,N-dimethylpropan-1amine; N-Ethyl-N'(3-dimethylaminopropyl)carbodiimide hydrochloride; EDC hydrochloride; 1-(3Dimethylaminopropyl)-3-Ethylcarbodiimide HCl

Impurities and stabilizing additives

No additional ingredients present known to the supplier, which are classified as hazardous to health or environment, which would require reporting herein.

Hazardous components

1. 1-[3-(Dimethylamino)propyl]-3-ethyl carbodiimide hydrochloride

Concentration

Not specified

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SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice	In the event of exposure, move away from the dangerous area, and contact a physician immediately. Show this safety data sheet to physician, as a reference.
If inhaled	Move affected person to fresh air. Give artificial respiration if person is not breathing. Contact a physician immediately.
In case of skin contact	Wash and scrub thoroughly with soap and water. Contact a physician.
In case of eye contact	Without delay, flush and rinse the inside and outside of the eyelid with copious amounts of water. Ensure that contact lenses, if present are removed. Contact a physician immediately.
If swallowed	Do not give anything by mouth if person is unconscious. Wash mouth with water. If material has been swallowed, give small amounts of water to the affected person. Contact a physician immediately.

4.2 Most important symptoms/effects, acute and delayed

The most important symptoms and effects are described in section 2 and section 11.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Data not available.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Water spray, dry chemical, carbon dioxide or alcohol resistant foam are all suitable extinguishing media.

5.2 Specific hazards arising from the chemical

No specific fire or explosion hazards known, although nitrogen oxides (NO_x), sulfur oxides, sodium oxides and carbon oxides may form in the event of a fire.

5.3 Special protective actions for fire-fighters

Firefighters should wear a self-contained breathing apparatus (SCBA) with full face piece and other appropriate protective equipment.

Further information

Potentially Hazardous Thermal Decomposition Products Formed In The Event of Fire Include:

- Carbon monoxide
- Carbon dioxide
- Nitrogen oxides (NO_x)
- Hydrogen chloride gas

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear appropriate personal protective equipment. Avoid breathing dust, vapors, mist or gas. Evacuate the affected area, keeping unprotected personnel away from the area. Avoid dust creation, and do not walk through spilled material.

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6.2 Environmental precautions

Take adequate precautions to prevent spilled materials from entering waterways, sewers or drainage systems. Prevent further spillage of material, if possible.

6.3 Methods and materials for containment and cleaning up

Without creating dust, scoop the spilled contents and store in a suitable, closed container for disposal.

Reference to other sections

See section 13 for disposal information

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid the formation of dust or aerosols. Use in a well ventilated area, such as a fume hood. Avoid contact with skin, eyes or respiratory tract.

7.2 Conditions for safe storage, including any incompatibilities

Keep stored in a tightly closed container, protected from moisture and direct sunlight.

Recommended Storage temperature: - 20 °C

Specific end use(s)

For laboratory use only. Intended for use as a research laboratory chemical or in the manufacturing of substances.

SECTION 8: Exposure controls/personal protection

8.2 Appropriate engineering controls

Use this substance in a well ventilated locations, such as a fume hood. Do not contact this substance with the skin, eyes or clothing.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Pictograms



Eye/face protection

Use a face shield (minimum 8 inches) and government tested and approved safety goggles, such as NIOSH (US) or EN 166 (EU).

Skin protection

MINIMUM PROTECTIVE CLOTHING: If Tyvek-type disposable protective clothing is not worn during handling of this chemical, wear disposable Tyvek-type sleeves taped to your gloves. ***RECOMMENDED GLOVE MATERIALS:** GlovES+ Expert System Glove Types For The Neat (Undiluted) Chemical: This chemical has not been tested for permeation by Radian Corporation; however, the GlovES+ expert system was used to extrapolate permeation test information from compounds in the same chemical class. The GlovES+ system uses permeation data from literature sources; therefore, extra safety margins should be used with the estimated protection time(s). If this chemical makes direct contact with your glove, or if a tear, puncture or hole develops, replace them at once. The GlovES+ expert system is a tool that can help people better manage protection from chemicals, however this tool cannot replace sound judgment nor make technical decisions. Our GlovES+ expert system is designed to offer initial advice and assistance in glove selection while the final glove selection should be made by knowledgeable individuals based on the specific circumstances involved. Glove Type Model Number Thickness Estimated Protection Time Natural Rubber Ansell No Powder Unknown 240 min. Neoprene Edmont 29-870 0.38 mm 420 min. Nitrile Edmont 49-155 0.38 mm 480 min. PVC Comasec Normal Unknown 240 min.

Body protection

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Complete chemical protective suit is recommended. The personal protective equipment should be selected based upon the concentration and amount of chemical at work station.

Respiratory protection

As a secondary control, and when appropriate, use an air purifying respirator, with replacement cartridges, N100 (US) or type P3 (EN 143).

Environmental exposure controls

Do not allow this product to enter drains, sewer or water ways.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	White Solid
Odor	not available
Odor threshold	not available
pH	not available
Melting point/freezing point	110-115
Initial boiling point and boiling range	not available
Flash point	not available
Evaporation rate	not available
Flammability (solid, gas)	not available
Upper/lower flammability limits	not available
Upper/lower explosive limits	not available
Vapor pressure	not available
Vapor density	not available
Relative density	not available
Solubility(ies)	water soluble at 0.2 g/L
Partition coefficient: n-octanol/water	not available
Auto-ignition temperature	not available
Decomposition temperature	not available
Viscosity	not available
Explosive properties	not available
Oxidizing properties	not available

SECTION 10: Stability and reactivity

10.1 Reactivity

No test data available regarding the reactivity of this product or its ingredients.

10.2 Chemical stability

Product is stable.

10.3 Possibility of hazardous reactions

Data Not Available

10.4 Conditions to avoid

Data Not Available

10.5 Incompatible materials

Data Not Available

10.6 Hazardous decomposition products

- Carbon monoxide
- Carbon dioxide
- Nitrogen oxides (NOx)

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-Hydrogen chloride gas

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

LD50 Oral - 50 mg / kg (Rat)

LC50 Inhalation - not available

LD50 Intravenous - 56 mg/kg (mouse)

Skin corrosion/irritation

Data Not Available

Serious eye damage/irritation

Data Not Available

Respiratory or skin sensitization

Data Not Available

Germ cell mutagenicity

Data Not Available

Carcinogenicity

Data Not Available

Reproductive toxicity

Data Not Available

Summary of evaluation of the CMR properties

Data Not Available

STOT-single exposure

Inhalation - Prolonged exposure may cause respiratory irritation and sensitization

STOT-repeated exposure

Data Not Available

Aspiration hazard

Data Not Available

Additional information

Data Not Available

SECTION 12: Ecological information

Toxicity

Data Not Available

Persistence and degradability

Data Not Available

Bioaccumulative potential

Data Not Available

Mobility in soil

Data Not Available

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Results of PBT and vPvB assessment

Data Not Available

Other adverse effects

Data Not Available

SECTION 13: Disposal considerations

Disposal of the product

Generation of waste should be kept to a minimum when possible. Any waste generated should be recycled when possible. Please dispose any unused or used materials in accordance with applicable national, regional and local laws and regulations.

Disposal of contaminated packaging

Dispose of in the same way as disposing of unused product.

SECTION 14: Transport information

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

SARA 302 Components

No chemical present in this material are subject to the reporting requirements of SARA Title III, Section 302

SARA 311/312 Hazards

Acute Health Hazard

SARA 313 Components

No chemical present in this material are subject to the reporting requirements of SARA Title III, Section 313

Massachusetts Right To Know Components

No chemicals present are subject to the Massachusetts Right to Know Act.

New Jersey Right To Know Components

1-(3-(Dimethylamino)propyl)-3-ethyl-carbodiimide hydrochloride, CAS No. 25952-53-8

Pennsylvania Right To Know Components

1-(3-(Dimethylamino)propyl)-3-ethyl-carbodiimide hydrochloride, CAS No. 25952-53-8

California Prop. 65 Components

This product does not contain any chemicals known to the state of California to cause cancer, birth defects or other forms of reproductive harm.

Toxic Substances Control Act (TSCA) Inventory

Listed: 1,3-Propanediamine, N`-(ethylcarbonimidoyl)-N,N-dimethyl-, monohydrochloride, CAS: 25952-53-8 (98-100 %)

15.2 Chemical Safety Assessment

The customer shall determine the appropriate level of personal protective equipment to use.

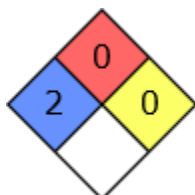
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HMIS Rating

1-[3-(Dimethylamino)propyl]-3-ethyl carbodiimide hydrochloride	
HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	

NFPA Rating



SECTION 16: Other information

16.1 Further information/disclaimer

The information represented in this Safety Data Sheet is believed to be correct and is based on the current state of our knowledge. This document or any other document does not represent or suggest any type of warranty or guarantee of the product properties or characteristics of this material. CovaChem, LLC and its affiliates shall not be held liable for any damages that result from contact with the above product or handling this product or any others.