

# Safety Data Sheet

according to regulation (EC) No 1907/2006

Product name: EDC  
Version: 1.0  
Revision date: 12.04.2021

## 1 Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

**Product Name:** EDC  
**Product Number:** not sold separately  
**As part of kits:** 2-4380-000  
**Registration Number:**

A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

### 1.2 Relevant identified uses of the substance or mixture

laboratory chemical

#### and uses advised against:

No relevant information available.

### 1.3 Details of the supplier of the safety data sheet

**Supplier:** IBA GmbH  
Rudolf-Wissell-Str. 28  
37079 Göttingen  
Germany  
**Telephone:** +49-551-50672- 0  
**E-mail:** info@iba-lifesciences.com

### 1.4 Emergency Telephone Number

**Emergency Phone:** +49 (0)551/ 19240 (Poison Information Center Göttingen)

## 2 Hazards Identification

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008 [CLP]

Acute Tox. Oral 4 (H302), Acute Tox. Dermal 3 (H311), Skin Irrit. 2 (H315), Eye Irrit. 2 (H319), STOT RE (H373), Repr. 2 (H361), Chronic Aquatic 1 (H410)

### 2.2 Label elements

#### Labeling according to Regulation (EC) No 1272/2008 [CLP]

##### Hazard pictogram:



**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.

- H373 May cause damage to organs (stomach, large intestine, lymph node) through prolonged or repeated exposure if swallowed.  
H410 Very toxic to aquatic life with long lasting effects.

**Precautionary statements:**

- P260 Do not breathe dust / fume / gas / mist / vapors / spray.  
P273 Avoid release to the environment.  
P280 Wear protective gloves / protective clothing.  
P301+P312 IF SWALLOWED: Call a poison center / doctor if you feel unwell.  
P302+P352+P312 IF ON SKIN: Wash with plenty of water. Call a poison center / doctor if you feel unwell.  
P314 Get medical advice / attention if you feel unwell.  
EUH phrases: n/a

**2.3 Other hazards**

All chemicals are potentially dangerous. They should only be handled by specially trained personnel.

**3 Composition/Information on ingredients**

**3.1 Chemical characterization: Substances**

- Name:** EDC  
**Synonyms:** 1-Ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride  
3-(Ethyliminomethyleneamino)-N,N-dimethylpropan-1-amine hydrochloride  
**Molecular formula:** C<sub>8</sub>H<sub>17</sub>N<sub>3</sub> · HC  
**Molar mass:** 191.70 g/mol  
**CAS-No.:** 25952-53-8  
**EC-No.:** 247-361-2

**4 First aid measures**

**4.1 Description of first aid measures**



- After inhalation:** Provide fresh air. If feeling unwell, consult a physician.  
**After skin contact:** Wash with plenty of soap and water. If skin irritation occurs, consult a physician.  
**After eye contact:** Flush eyes with water for at least 10 minutes. If irritation persists, consult a physician.  
**After ingestion:** Rinse mouth and drink water if conscious. If feeling unwell, consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**

Irritations

**4.3 Indications of any immediate medical attention and special treatment needed**

No relevant information available.

**5 Firefighting measures**

**5.1 Extinguishing media**

**Suitable extinguishing media**

CO<sub>2</sub>, dry extinguishing powder, foam, or water spray.

**Unsuitable extinguishing media**

No relevant information available.

## 5.2 Special hazards arising from the substance of mixture

In case of fire irritant gases may be liberated.

## 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary (see section 5.2).

## 6 Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear suitable protective equipment.  
Avoid eye and skin contact.  
Provide suitable ventilation.

### 6.2 Environmental precautions

Do not let product enter drains.

### 6.3 Methods and material for containment and cleaning up

Take up mechanically.  
Place in appropriate containers for disposal.  
Provide suitable ventilation.

### 6.4 Reference to other sections

Information about safe handling: see section 7.  
Information about protective equipment: see section 8.  
Information for disposal: see section 13.

## 7 Handling and storage

### 7.1 Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed.  
Keep containers, equipment, and workplace clean.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage rooms and containers:** Keep dry and in a well-ventilated place.

**Incompatible substances or mixtures:** Keep away from food and drink.

**Consideration of other advice:** Keep containers tightly closed.

**Recommended storage temperature:** -25 – -15 °C

### 7.3 Specific end use(s)

No relevant information available.

## 8 Exposure controls/personal protection

### 8.1 Control parameters

**Components with workplace control parameters:** none

### 8.2 Exposure controls

#### General precautionary and hygiene measures

The usual precautions for handling chemicals should be observed.  
Avoid contact with eyes and skin.  
Wash hands before breaks and after work.

### Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Inspect gloves prior to each use. Choose suitable gloves according to break through time, permeation rate and material degradation.

#### Glove material

Nitrile rubber, minimum layer thickness:  $\geq 0,11$  mm

The suitability of gloves depends on several quality characteristic besides the material. It may differ from one supplier to another.

#### Break through time

Break through level: Level  $\geq 6$

The exact break through time should be inquired from the supplier and should be observed.

### Eye protection

Use safety goggles with side protection.

### Body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Appearance:</b>	off-white powder
<b>Odor:</b>	odorless
<b>Odor threshold:</b>	no data available
<b>pH:</b>	no data available
<b>Melting point:</b>	110 – 115 °C
<b>Freezing point:</b>	no data available
<b>Initial boiling point and boiling range:</b>	no data available
<b>Flash point:</b>	no data available
<b>Evaporation rate:</b>	no data available
<b>Upper/lower explosive limits:</b>	no data available
<b>Vapor pressure:</b>	< 1.3 hPA at 20 °C (OECD Test Guideline 104)
<b>Vapor density:</b>	no data available
<b>Relative density:</b>	1.044 g/cm <sup>3</sup> at 20 °C (OECD Test Guideline 109)
<b>Water solubility:</b>	1.000 g/l at 20 °C (OECD Test Guideline 105)
<b>Partition coefficient (n-octanol/water):</b>	log Pow: -2.98 at 20 °C (OECD Test Guideline 107) Bioaccumulation is not expected.
<b>Viscosity:</b>	no data available
<b>Explosive properties:</b>	no data available
<b>Oxidizing properties:</b>	no data available

## 9.2 Other safety information

No further relevant information available.

## 10 Stability and reactivity

### 10.1 Reactivity

See section 10.3

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No relevant information available.

### 10.4 Conditions to avoid

No relevant information available.

### 10.5 Incompatible materials

Strong oxidizing agents, strong acids.

### 10.6 Hazardous decomposition products

In the event of fire: see section 5.

## 11 Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral – Rat – female – 500 mg/kg (OECD Test Guideline 423)

LD50 Dermal – Rat – male and female - > 200-1000 mg/kg (OECD Test Guideline 402)

#### Skin corrosion/irritation

Skin – Rabbit, result: severe skin irritation (OECD Test Guideline 404)

#### Serious eye damage/eye irritation

Causes serious eye irritation.

#### Respiratory or skin sensitization.

Local lymph node assay (LLNA) – Mouse – may cause allergic skin reaction (OECD Test Guideline 429)

#### Germ cell mutagenicity

No relevant information available.

#### Carcinogenicity

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### Reproductive toxicity

Suspected of damaging the unborn child.

#### Specific target organ toxicity – single exposure

May cause respiratory irritation.

#### Specific target organ toxicity – repeated exposure

Oral – may cause damage to organs through prolonged or repeated exposure: stomach, large intestine, lymph node

## Aspiration hazard

No relevant information available.

## 12 Ecological information

### 12.1 Toxicity

#### Toxicity to fish

static test LC50-Cyprinus carpio (Carp) - 4,6 mg/l - 96 h (OECD Test Guideline 203)

#### Toxicity to daphnia and other aquatic invertebrates

EC50-Daphnia magna (Water flea) - 0,41 mg/l - 48 h (ISO 6341)

#### Toxicity to bacteria

EC50-activated sludge-> 347 -< 470 mg/l - 3 h (OECD Test Guideline 209)

### 12.2 Persistence and degradability

#### Biodegradability

Aerobic chemical oxygen demand-Exposure time 28 d

Result: < 5 %-Not readily biodegradable (OECD Test Guideline 301F)

### 12.3 Bioaccumulative potential

No relevant information available.

### 12.4 Mobility in soil

No relevant information available.

### 12.5 Results of PBT- and vPvB-assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Other adverse effects

No relevant information available.

## 13 Disposal considerations

### 13.1 Waste treatment methods

#### Recommendation for product:

The disposal is regionally differently regulated, therefore the kind of disposal is to be inquired at the responsible authorities.

#### Contaminated packaging:

Dispose of as unused product.

## 14 Transport information

### 14.1 UN-Number

ADR/RID: 2811

IMDG: 2811

IATA: 2811

### 14.2 UN proper shipping name

ADR/RID: TOXIC SOLID, ORGANIC, N.O.S.(1-(3-(Dimethylamino)propyl)-3-ethyl-carbodiimide hydrochloride)

IMDG: TOXIC SOLID, ORGANIC, N.O.S.(1-(3-(Dimethylamino)propyl)-3-ethyl-carbodiimide hydrochloride)

IATA: Toxic solid, organic, n.o.s.(1-(3-(Dimethylamino)propyl)-3-ethyl-carbodiimide hydrochloride)

