# **Material Safety Data Sheet**

Version 5.0 Revision Date 04/21/2012 Print Date 03/19/2013

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : N-(3-Dimethylaminopropyl)-N'-ethylcarbodiimide hydrochloride

Product Number : E1769

Brand : Sigma-Aldrich

Supplier : Sigma-Aldrich

3050 Spruce Street

SAINT LOUIS MO 63103

USA

Telephone : +1 800-325-5832 Fax : +1 800-325-5052 Emergency Phone # (For : (314) 776-6555

both supplier and

manufacturer)

Preparation Information : Sigma-Aldrich Corporation

Product Safety - Americas Region

1-800-521-8956

### 2. HAZARDS IDENTIFICATION

# **Emergency Overview**

#### **OSHA Hazards**

Irritant

# **GHS Classification**

Skin irritation (Category 2)

Serious eye damage (Category 1)

Specific target organ toxicity - single exposure (Category 3)

# GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H335 May cause respiratory irritation.

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P280 Wear protective gloves/ eye protection/ face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

**HMIS Classification** 

Health hazard: 2 Flammability: 0 Physical hazards: 0

**NFPA Rating** 

Health hazard: 2
Fire: 0
Reactivity Hazard: 0

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### **Potential Health Effects**

InhalationMay be harmful if inhaled. Causes respiratory tract irritation.SkinMay be harmful if absorbed through skin. Causes skin irritation.

**Eyes** Causes eye irritation.

**Ingestion** May be harmful if swallowed.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : EDAC

**EDChydrochloride** 

N-Ethyl-N'-(3-dimethylaminopropyl)carbodiimidehydrochloride

WSChydrochloride

Formula :  $C_8H_{17}N_3 \cdot HCI$ Molecular Weight : 191.70 g/mol

Component		Concentration
1-(3-(Dimethylamino)propyl)-3-ethyl-carbodiimide hydrochloride		
CAS-No.	25952-53-8	-
EC-No.	247-361-2	

#### 4. FIRST AID MEASURES

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

# **5. FIREFIGHTING MEASURES**

# **Conditions of flammability**

Not flammable or combustible.

# Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

# Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

# **Hazardous combustion products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride gas

# **6. ACCIDENTAL RELEASE MEASURES**

# Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

# **Environmental precautions**

Do not let product enter drains.

#### Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

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### 7. HANDLING AND STORAGE

# Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

#### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: -20 °C

Moisture sensitive. Store under inert gas.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

### Personal protective equipment

# Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

# Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

# Eye protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin and body protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### **Appearance**

Form solid Colour white

# Safety data

pH no data available

Melting point/range: 110 - 115 °C (230 - 239 °F)

point/freezing point

Boiling point no data available
Flash point no data available
Ignition temperature no data available
Autoignition no data available

temperature

Lower explosion limit no data available
Upper explosion limit no data available

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Vapour pressure < 1.3 hPa (< 1.0 mmHg) at 20 °C (68 °F)

Density no data available

Water solubility

0.2 g/l

Partition coefficient:

no data available

n-octanol/water

Relative vapour

no data available

density

Odour no data available
Odour Threshold no data available
Evaporation rate no data available

#### 10. STABILITY AND REACTIVITY

## **Chemical stability**

Stable under recommended storage conditions.

# Possibility of hazardous reactions

no data available

#### Conditions to avoid

no data available

#### Materials to avoid

Strong oxidizing agents, Strong acids

# **Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride gas

Other decomposition products - no data available

### 11. TOXICOLOGICAL INFORMATION

### **Acute toxicity**

### Oral LD50

no data available

# **Inhalation LC50**

no data available

### **Dermal LD50**

no data available

#### Other information on acute toxicity

LD50 Intravenous - mouse - 56 mg/kg

#### Skin corrosion/irritation

no data available

# Serious eye damage/eye irritation

no data available

#### Respiratory or skin sensitization

Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

# Germ cell mutagenicity

no data available

# Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a

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carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a

known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by OSHA.

### Reproductive toxicity

no data available

# **Teratogenicity**

no data available

# Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

# Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

# **Aspiration hazard**

no data available

#### Potential health effects

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes** Causes eye irritation.

## Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### Synergistic effects

no data available

#### **Additional Information**

RTECS: FF2200000

# 12. ECOLOGICAL INFORMATION

# **Toxicity**

no data available

# Persistence and degradability

no data available

### Bioaccumulative potential

no data available

# Mobility in soil

no data available

# PBT and vPvB assessment

no data available

#### Other adverse effects

no data available

# 13. DISPOSAL CONSIDERATIONS

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

# Contaminated packaging

Dispose of as unused product.

### 14. TRANSPORT INFORMATION

### DOT (US)

Not dangerous goods

#### **IMDG**

Not dangerous goods

#### **IATA**

Not dangerous goods

### 15. REGULATORY INFORMATION

#### **OSHA Hazards**

Irritant

## **SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## **SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 Hazards

Acute Health Hazard

# **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

# Pennsylvania Right To Know Components

CAS-No. Revision Date

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

25952-53-8

# **New Jersey Right To Know Components**

CAS-No.

**Revision Date** 

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

25952-53-8

# California Prop. 65 Components

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

# **16. OTHER INFORMATION**

#### **Further information**

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