1 Identification

Product identifier

Product name: 1-(3-Dimethylaminopropyl)-3-ethylcarbodiimide hydrochloride

Stock number: A10807
CAS Number: 25952-53-8
EC number: 247-361-2

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

Identified use: SU24 Scientific research and development

Details of the supplier of the safety data sheet

Manufacturer/Supplier:
Alfa Aesar
Thermo Fisher Scientific Chemicals, Inc.
30 Bond Street
Ward Hill, MA 01835-8099
Tel: 800-343-0660
Fax: 800-322-4757
Email: tech@alfa.com
www.alfa.com

Information Department: Health, Safety and Environmental Department

Emergency telephone number:
During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789.

2 Hazard(s) identification

Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)

GHS07
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.
STOT SE 3 H335 May cause respiratory irritation.

Hazards not otherwise classified No information known.

Label elements

GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)

Hazard pictograms

GHS07

Signal word Warning

Hazard statements

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves and/or protective clothing and eye protection/face protection.
P355+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/Regional/National/International regulations.

WHMIS classification

D2B - Toxic material causing other toxic effects

Classification system

HMIS ratings (scale 0-4)
(Hazardous Materials Identification System)

Health (acute effects) = 1
Flammability = 1
Physical Hazard = 1

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Substances

CAS# Description: 25952-53-8 1-(3-Dimethylaminopropyl)-3-ethylcarbodiimide hydrochloride

Identification number(s):
EC number: 247-361-2

4 First-aid measures

Description of first aid measures

After inhalation
Supply fresh air. If required, provide artificial respiration. Keep patient warm.
Seek immediate medical advice.

After skin contact
Immediately wash with water and soap and rinse thoroughly.

(Contd. on page 2)
5 Fire-fighting measures
Extinguishing media
Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Special hazards arising from the substance or mixture
If this product is involved in a fire, the following can be released:
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)
Possibly Hydrogen cyanide (HCN)
Advice for firefighters
Protective equipment:
Wear self-contained respirator.
Wear fully protective impervious suit.

6 Accidental release measures
Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Environmental precautions: Do not allow material to be released to the environment without proper governmental permits.
Methods and material for containment and cleaning up: Ensure adequate ventilation.
Prevention of secondary hazards: No special measures required.
Reference to other sections
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage
Handling
Precautions for safe handling
Handle under dry protective gas.
Keep container tightly sealed.
Ensure good ventilation at the workplace.
Information about protection against explosions and fires: No information known.
Conditions for safe storage, including any incompatibilities
Storage
Requirements to be met by storerooms and receptacles: Refrigerate
Information about storage in one common storage facility:
Store away from oxidizing agents.
Protect from heat.
Store away from water/moisture.
Further information about storage conditions:
Store under dry inert gas.
This product is moisture sensitive.
Keep container tightly sealed.
Protect from humidity and water.
Refrigerate
Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection
Additional information about design of technical systems:
Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.
Control parameters
Components with limit values that require monitoring at the workplace: Not required.
Additional information: No data
Exposure controls
Personal protective equipment
General protective and hygienic measures
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Remove all soiled and contaminated clothing immediately.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Maintain an ergonomically appropriate working environment.
Breathing equipment: Use suitable respirator when high concentrations are present.
Protection of hands:
Impervious gloves
Check protective gloves prior to each use for their proper condition.
The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.
Penetration time of glove material (in minutes) Not determined
Eye protection: Safety glasses
Body protection: Protective work clothing.

9 Physical and chemical properties
Information on basic physical and chemical properties
General Information
Appearance:
Form: Various forms (powder/flake/crystalline/beads, etc.)
Color: White
Odor: Not determined
Odor threshold: Not determined.
pH-value: Not applicable.
**Product name:** 1-(3-Dimethylaminopropyl)-3-ethylcarbodiimidehydrochloride

### 10 Stability and reactivity

**Reactivity**

No information known.

**Chemical stability**

Stable under recommended storage conditions.

**Thermal decomposition / conditions to be avoided**

Decomposition will not occur if used and stored according to specifications.

**Possibility of hazardous reactions**

No dangerous reactions known

**Conditions to avoid**

No further relevant information available.

**Incompatible materials**

- Water/moisture
- Oxidizing agents
- Heat

**Hazardous decomposition products**

- Carbon monoxide and carbon dioxide
- Nitrogen oxides
- Possibly Hydrogen cyanide (HCN)

### 11 Toxicological information

**Information on toxicological effects**

**Acute toxicity**

No effects known.

**LD/LC50 values that are relevant for classification**

No data

**Skin irritation or corrosion**

Causes skin irritation.

**Eye irritation or corrosion**

Causes serious eye irritation.

**Sensitization**

No sensitizing effects known.

**Germ cell mutagenicity**

No effects known.

**Carcinogenicity**

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

**Reproductive toxicity**

No effects known.

**Specific target organ system toxicity - repeated exposure**

No effects known.

**Specific target organ system toxicity - single exposure**

May cause respiratory irritation.

**Aspiration hazard**

No effects known.

**Subacute to chronic toxicity**

No effects known.

**Additional toxicological information**

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

### 12 Ecological information

**Toxicity**

Aquatic toxicity: No further relevant information available.

**Persistence and degradability**

No further relevant information available.

**Bioaccumulative potential**

No further relevant information available.

**Mobility in soil**

No further relevant information available.

**General notes**

- Do not allow material to be released to the environment without proper governmental permits.
- Do not allow undiluted product or large quantities to reach ground water, water course or sewage system.
- Avoid transfer into the environment.
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

**Other adverse effects**

No further relevant information available.

### 13 Disposal considerations

**Waste treatment methods**

Recommendation: Consult state, local or national regulations to ensure proper disposal.

**Uncleaned packagings:**

Recommendation: Disposal must be made according to official regulations.

### 14 Transport information

**UN-Number**

DOT, ADN, IMDG, IATA: Not applicable

**UN proper shipping name**

DOT, ADN, IMDG, IATA: Not applicable
Product name: 1-(3-Dimethylaminopropyl)-3-ethylcarbodiimidehydrochloride

Transport hazard class(es)
DOT, ADR, ADN, IMDG, IATA
Class Not applicable

Packing group
DOT, IMDG, IATA Not applicable

Environmental hazards:
Not applicable.

Special precautions for user
Not applicable.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable.

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture
GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)
Hazard pictograms

GHS07

Signal word Warning
Hazard statements
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P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

16 Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information 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.

Department issuing SDS: Global Marketing Department
Date of preparation / last revision 11/24/2015 / -

Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organization
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LD50: Lethal dose, 50 percent
LC50: Lethal concentration, 50 percent
vPvB: very Persistent and very Bioaccumulative
ACGIH: American Conference of Governmental Industrial Hygienists (USA)
OSHA: Occupational Safety and Health Administration (USA)
NTP: National Toxicology Program (USA)
AIRC: International Agency for Research on Cancer
EPA: Environmental Protection Agency (USA)