

Safety Data Sheet
according to 1907/2006/EC, Article 31

Revision: 20.08.2010

Printing date 20.08.2010

1 Identification of substance**Product details**

Trade name

N-Allylthiourea

Stock number:

L03377, 41371

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG
Benzstrasse 3
D-76185 Karlsruhe / GermanyE-mail: gcat@matthey.com
www.alfa-chemcat.com

Informing department:

Product safety department.
Giftnotruf Universität Mainz / Poison Information Center Mainz
www.giftinfo.uni-mainz.de Telefon:+49(0)6131/19240

Emergency information:

2 Hazards identification

Hazard designation:



T Toxic

Information pertaining to particular dangers for man and environment

R 25 Toxic if swallowed.
R 43 May cause sensitisation by skin contact.

GHS label elements

**Danger**

H301 - Toxic if swallowed.

WarningH317 - May cause an allergic skin reaction.
P262 Do not get in eyes, on skin, or on clothing.
P280 Wear protective gloves/clothing.
P309 IF exposed or if you feel unwell:
P310 Immediately call a POISON CENTER or doctor/physician.

Prevention:

Response:

3 Composition/information on ingredients

Chemical characterization:

Designation: (CAS#)

N-Allylthiourea (CAS# 109-57-9)

Identification number(s):

EINECS Number:

203-683-5

4 First aid measures

General information

Instantly remove any clothing soiled by the product.
In case of irregular breathing or respiratory arrest provide artificial respiration.

After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After skin contact

Seek immediate medical advice.
Instantly wash with water and soap and rinse thoroughly.

After eye contact

Seek immediate medical advice.
Rinse opened eye for several minutes under running water. Then consult doctor.

After swallowing

Do not induce vomiting; instantly call for medical help.
Seek immediate medical advice.**5 Fire fighting measures**

Suitable extinguishing agents

CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

Special hazards caused by the material, its products of combustion or flue gases:

Can be released in case of fire:
Sulphur oxides (SO_x)
Nitrogen oxides (NO_x)
Possibly Hydrogen cyanide (HCN)
Carbon monoxide and carbon dioxide
Wear self-contained breathing apparatus.
Wear full protective suit.

Protective equipment:

6 Accidental release measures

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away.

Measures for environmental protection:

Ensure adequate ventilation
Do not allow material to be released to the environment without proper governmental permits.

Measures for cleaning/collecting:

Dispose of contaminated material as waste according to item 13.

Additional information:

Ensure adequate ventilation.
See Section 7 for information on safe handling
See section 8 for information on personal protection equipment.
See Section 13 for information on disposal.**7 Handling and storage**

Handling

Information for safe handling:

Keep containers tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation/exhaustion at the workplace.

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Storage Requirements to be met by storerooms and containers:

No special requirements.

Information about storage in one common storage facility:

Store away from oxidizing agents.

Further information about storage conditions:

Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
Store in a locked cabinet or with access restricted to technical experts or their assistants.**8 Exposure controls and 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.

Components with critical values that require monitoring at the workplace:

Not required.

Additional information:

No data

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Personal protective equipment
General protective and hygienic measures The usual precautionary measures should be adhered to in handling the chemicals.
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.
Breathing equipment: Use breathing protection with high concentrations.
Eye protection: Safety glasses
Face protection
Body protection: Protective work clothing.

9 Physical and chemical properties:**General Information**

Form: Crystalline
Colour: White
Cream coloured
Smell: Unpleasant

Change in condition
Melting point/Melting range: 70-78°C
Boiling point/Boiling range: Not determined
Sublimation temperature / start: Not determined

Flash point: Not applicable**Ignition temperature:** Not determined**Decomposition temperature:** Not determined**Danger of explosion:** Product is not explosive.

Critical values for explosion:
Lower: Not determined
Upper: Not determined

Steam pressure: Not determined**Density at 20°C** 1.22 g/cm³

Solubility in / Miscibility with
Water at 20°C: 67 g/l

10 Stability and reactivity

Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.
Materials to be avoided: Oxidizing agents
Dangerous reactions: No dangerous reactions known
Dangerous products of decomposition: Sulphur oxides (SO_x)
Nitrogen oxides (NO_x)
Carbon monoxide and carbon dioxide
Possibly Hydrogen cyanide (HCN)

11 Toxicological information**Acute toxicity:****LD/LC50 values that are relevant for classification:**

Oral LD50 200 mg/kg (rat) (RTECS)

Primary irritant effect:

on the skin: May cause irritation
on the eye: May cause irritation
Sensitization: Sensitization possible by skin contact.

Other information (about experimental toxicology):

Additional toxicological information: Bacterial mutagenicity test: Ames Salmonella typhimurium: Negative
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.

Sensitisation May cause sensitisation by skin contact.**12 Ecological information:****Additional ecological information:**

General notes: Water hazard class 1 (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.
Do not allow material to be released to the environment without proper governmental permits.

13 Disposal considerations

Product:
Recommendation Consult state, local or national regulations for proper disposal.
Hand over to disposers of hazardous waste.
Must be specially treated under adherence to official regulations.

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.
Recommended cleaning agent: Water, if necessary with cleaning agent.

14 Transport information**Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**

ADR/RID-GGVS/E Class: 6.1 (T2) Toxic substances.
Kemler Number: 60
UN-Number: 2811
Packaging group: III
Label 6.1
Designation of goods: 2811 TOXIC SOLID, ORGANIC, N.O.S. (N-Allylthiourea)

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Limited quantities (LQ) LQ9
 Transport category 2
 Tunnel restriction code E

Maritime transport IMDG/GGVSea:

IMDG/GGVSea Class: 6.1
 UN Number: 2811
 Label: 6.1
 Packaging group: III
 Marine pollutant: No
 Correct technical name: TOXIC SOLID, ORGANIC, N.O.S. (N-Allylthiourea)

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: 6.1
 UN/ID Number: 2811
 Label: 6.1
 Packaging group: III
 Correct technical name: TOXIC SOLID, ORGANIC, N.O.S. (N-Allylthiourea)

UN "Model Regulation":

UN2811, TOXIC SOLID, ORGANIC, N.O.S., 6.1, III

15 Regulatory information**Designation according to EC guidelines:****Code letter and hazard designation of product:**

T Toxic

Risk phrases:

25 Toxic if swallowed.
 43 May cause sensitisation by skin contact.

Safety phrases:

24 Avoid contact with skin.
 36/37 Wear suitable protective clothing and gloves.
 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

National regulations**Information about limitation of use:**

Employment restrictions concerning young persons must be observed.
 For use only by technically qualified individuals.

Water hazard class:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

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 data specification sheet: Health, Safety and Environmental Department.**Contact:** Zachariah Holt**Abbreviations and acronyms:** ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement 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" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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