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

Printing date 10.08.2010 Revision: 10.08.2010

1 Identification of substance

Product details

(3R-cis)-Tetrahydro-3-trichloromethyl-1H,3H-pyrrolo[1,2-c]oxazol-1-one Trade name

Stock number:

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG

Benzstrasse 3 D-76185 Karlsruhe / Germany

Product safety department.

Informing department: **Emergency information:** Giftnotruf Universität Mainz / Poison Information Center Mainz

void

www.giftinfo.uni-mainz.de Telefon:+49(0)6131/19240

2 Hazards identification

Hazard designation:

Information pertaining to particular dangers for man and environment

GHS label elements

Not applicable

3 Composition/information on ingredients

Chemical characterization:

(3R-cis)-Tetrahydro-3-trichloromethyl-1H,3H-pyrrolo[1,2-c]oxazol-1-one (CAS# 97538-67-5): 100% Designation: (CAS#)

4 First aid measures

After skin contact

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

Seek immediate medical advice.

Instantly wash with water and soap and rinse thoroughly.

Seek immediate medical advice

Rinse opened eye for several minutes under running water. Then consult doctor.

After eye contact After swallowing Seek medical treatment.

5 Fire fighting measures

Suitable extinguishing agents Special hazards caused by the material, its

products of combustion or flue gases:

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

Can be released in case of fire:

Carbon monoxide and carbon dioxide Hydrogen chloride (HCI)

Protective equipment:

Nitrogen oxides (NOx)
Wear self-contained breathing apparatus.
Wear full protective suit.

6 Accidental release measures

Person-related safety precautions:

Measures for environmental protection: Measures for cleaning/collecting: Additional information:

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation

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

Collect mechanically

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. No special precautions necessary if used correctly.

Information about protection against

explosions and fires:

Keep ignition sources away - Do not smoke.

Storage

Requirements to be met by storerooms and

containers: Information about storage in one common

storage facility:

Further information about storage

conditions:

No special requirements.

Store away from oxidizing agents.

Keep container tightly sealed. Store in cool, dry conditions in well sealed containers.

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: Additional information:

Not required. No data

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. Use breathing protection with high concentrations.

Breathing equipment: Protection of hands:

Check protective gloves prior to each use for their proper condition.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. Material of gloves

Penetration time of glove material

Eye protection:

Impervious gloves Not determined Safety glasses

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Trade name (3R-cis)-Tetrahydro-3-trichloromethyl-1H,3H-pyrrolo[1,2-c]oxazol-1-one (Contd. of page 1) **Body protection:** Protective work clothing. 9 Physical and chemical properties: General Information Form: Crystalline Smell: Not determined Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: 108-112°C Not determined 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 Not determined 10 Stability and reactivity Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications. Oxidizing agents Materials to be avoided: Dangerous reactions: Dangerous products of decomposition: No dangerous reactions known Carbon monoxide and carbon dioxide Hydrogen chloride (HCI) Nitrogen oxides (NOx) 11 Toxicological information Acute toxicity: Primary irritant effect: on the skin: May cause irritation on the eye: May cause irritation No sensitizing effect known. 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 Sensitizátion: Additional toxicological information: 12 Ecological information: Additional ecological information: 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. General notes: 13 Disposal considerations Product: Recommendation Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations. Consult state, local or national regulations for proper disposal. Uncleaned packagings: Disposal must be made according to official regulations. Recommendation: 14 Transport information Land transport ADR/RID and GGVS/GGVE (cross-border/domestic) ADR/RID-GGVS/E Class: None Maritime transport IMDG/GGVSea: IMDG/GGVSea Class: None Marine pollutant: Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: None

Transport/Additional information: Not dangerous according to the above specifications

15 Regulatory information

Designation according to EC guidelines:

Observe the normal safety regulations when handling chemicals The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials (GefStoffV).

National regulations

Information about limitation of use: 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.

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Contact: Abbreviations and acronyms:

Zachariah Holt

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 Maritime Code for Dangerous Goods
IATA: International Maritime Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Avaitation Organization
ICAO-TI: Technical Instructions by the "International Civil Avaitation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
CAS: Chemical Abstracts Service (division of the American Chemical Society)