

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 20.08.2010

Revision: 20.08.2010

1 Identification of substance

Product details

Trade name

Tetrahydrothiopyran

Stock number:

L03063

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.

Emergency information:

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

2 Hazards identification

Hazard designation:

void

Information pertaining to particular dangers
for man and environment
GHS label elements

R 10 Flammable.

**Danger**

H225 - Highly flammable liquid and vapour.

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

Prevention:

3 Composition/information on ingredients

Chemical characterization:

Tetrahydrothiopyran (CAS# 1613-51-0)

Designation: (CAS#)

Identification number(s):

216-561-1

EINECS Number:

4 First aid measures

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

Seek immediate medical advice.

5 Fire fighting measures

Suitable extinguishing agents

CO2, sand, extinguishing powder. Do not use water.

For safety reasons unsuitable extinguishing
agents

Water.

Special hazards caused by the material, its
products of combustion or flue gases:Can be released in case of fire:
Carbon monoxide and carbon dioxide
Sulphur oxides (SOx)

Protective equipment:

Wear self-contained breathing apparatus.
Wear full protective suit.

6 Accidental release measures

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away.

Measures for environmental protection:

Ensure adequate ventilation

Keep away from ignition sources

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

Measures for cleaning/collecting:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Keep away from ignition sources.

Additional information:

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.

Protect against electrostatic charges.

Fumes can combine with air to form an explosive mixture.

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.

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

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:

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

Protection of hands:

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Material of gloves	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.
Penetration time of glove material	Impervious gloves
Eye protection:	Not determined
Body protection:	Safety glasses
	Face protection
	Protective work clothing.

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9 Physical and chemical properties:

General Information	
Form:	Liquid
Colour:	Colourless
Smell:	Unpleasant
Change in condition	
Melting point/Melting range:	Not determined
Boiling point/Boiling range:	140-142°C
Sublimation temperature / start:	Not determined
Flash point:	21°C
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
Critical values for explosion:	
Lower:	Not determined
Upper:	Not determined
Steam pressure at 25°C:	10 hPa
Density at 20°C	0.988 g/cm³
Solubility in / Miscibility with Water:	Not miscible or difficult to mix

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:	Carbon monoxide and carbon dioxide Sulphur oxides (SOx)

11 Toxicological information

Acute toxicity:	
Primary irritant effect:	
on the skin:	May cause irritation
on the eye:	May cause irritation
Sensitization:	No sensitizing effect known.
Additional toxicological information:	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.



12 Ecological information:

Additional ecological information:	
General notes:	Generally not hazardous for water. Do not allow material to be released to the environment without proper governmental permits.

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:	
Recommendation:	Disposal must be made according to official regulations.

14 Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)	
	
ADR/RID-GGVS/E Class:	3 (F1) Flammable liquids.
Kemler Number:	33
UN-Number:	1993
Packaging group:	II
Label	3
Designation of goods:	1993 FLAMMABLE LIQUID, N.O.S. (vapor pressure at 50°C at most 110 kPa) (Tetrahydrothiopyran)
Limited quantities (LQ)	LQ4
Tunnel restriction code	D/E
Maritime transport IMDG/GGVSea:	
	
IMDG/GGVSea Class:	3
UN Number:	1993
Label	3
Packaging group:	II
Marine pollutant:	No

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Correct technical name: FLAMMABLE LIQUID, N.O.S. (Tetrahydrothiopyran)

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: 3
 UN/ID Number: 1993
 Label: 3
 Packaging group: II
 Correct technical name: FLAMMABLE LIQUID, N.O.S. (Tetrahydrothiopyran)

UN "Model Regulation":
 UN1993, FLAMMABLE LIQUID, N.O.S., 3, II

15 Regulatory information

Designation according to EC guidelines:

Risk phrases: 10 Flammable.

Safety phrases: 16 Keep away from sources of ignition - No smoking.
 23 Do not breathe fumes.

National regulations

Information about limitation of use: For use only by technically qualified individuals.

Water hazard class: Generally not 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)

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