E-mail: gcat@matthey.com

www.alfa-chemcat.com

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

Printing date 14.07.2010 Revision: 16.04.2009

1 Identification of substance

Product details

Trade name 2-sec-Butylthiazole

Stock number:

A13483 Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG Benzstrasse 3

D-76185 Karlsruhe / Germany

Informing department: Emergency information:

Product safety department. Giftnotruf Universität Mainz / Poison Information Center Mainz 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

void

void Void

3 Composition/information on ingredients

Chemical characterization: Designation: (CAS#) Identification number(s):

2-sec-Butylthiazole (CAS# 18277-27-5): 100%

EINECS Number: 242-154-3

4 First aid measures

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

Instantly wash with water and soap and rinse thoroughly. After inhalation

After skin contact

Seek immediate medical advice

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

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
Nitrogen oxides (NOx)
Sulphur oxides (SOx)
Wear self-contained breathing apparatus. Protective equipment:

Wear full protective suit.

6 Accidental release measures

Person-related safety precautions:

Measures for environmental protection: Measures for cleaning/collecting:

Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Do not allow material to be released to the environment without proper governmental permits.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
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

Additional information:

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. Protect against electrostatic charges.

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:

Material of gloves Eye protection:

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.
Avoid contact with the eyes and skin.
Use breathing protection with high concentrations.
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.
Safety glasses
Face protection
Protective work clothing.

Breathing equipment: Protection of hands:

Body protection:

(Contd. on page 2)

Printing date 14.07.2010 Revision: 16.04.2009

Trade name 2-sec-Butylthiazole

(Contd. of page 1)

	(Conta.	or page 1)
9 Physical and chemical properties:		
General Information		
Form: Colour: Smell:	Liquid Colourless Characteristic	
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:	Not determined 174-175°C Not determined	
Flash point:	58°C	
Ignition temperature:	Not determined	
Decomposition temperature:	Not determined	
Danger of explosion:	Product is not explosive.	
Critical values for explosion: Lower: Upper:	Not determined Not determined	
Steam pressure:	Not determined	
Density at 20°C	1.007 g/cm ³	
Solubility in / Miscibility with	No. 2 Th. 1970 has a	

10 Stability and reactivity

Thermal decomposition / conditions to be

avoided:

Water:

Materials to be avoided:

Dangerous reactions: Dangerous products of decomposition:

No decomposition if used and stored according to specifications. Oxidizing agents

Not miscible or difficult to mix

ONIVITING AGENTS
No dangerous reactions known
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)
Sulphur oxides (SOx)

11 Toxicological information

Acute toxicity:
Primary irritant effect:
on the skin:
on the eye:
Sensitization:

Additional toxicological information:

May cause irritation 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 ACGIH.

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.

14 Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)



3 (F1) Flammable liquids. 30

ADR/RID-GGVS/E Class: Kemler Number: UN-Number: Packaging group:

1993

Label Designation of goods

1993 FLAMMABLE LIQUID, N.O.S. (not viscous) (2-sec-Butylthiazole)

Limited quantities (LQ) Transport category Tunnel restriction code

LQ7 3 D/E

Maritime transport IMDG/GGVSea:



IMDG/GGVSea Class:

UN Number: Label Packaging group: EMS Number: 1993 3 III

Marine pollutant: Correct technical name:

E,S-E Nο FLAMMABLE LIQUID, N.O.S. (2-sec-Butylthiazole)

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class:

(Contd. of page 2)

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

Revision: 16.04.2009 Printing date 14.07.2010

Trade name 2-sec-ButyIthiazole

UN/ID Number: 1993

Label Packaging group: Correct technical name: 3 III

FLAMMABLE LIQUID, N.O.S. (2-sec-Butylthiazole)

UN "Model Regulation":

UN1993, FLAMMABLE LIQUID, N.O.S., 3, III

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.

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:
Contact:
Abbreviations and acronyms:

Health, Safety and Environmental Department.
Zachariah Holt
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Rail)
IMDG: International Air Transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Air Transport Association
IATA-DGR: Dangerous Goods Expalations 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)

GB