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

Printing date 14.07.2010 Revision: 14 07 2010

1 Identification of substance

**Product details** 

Trade name 2,4,5-Trimethyloxazole

Stock number:

A10328, L08041

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:

Xi Irritant

Information pertaining to particular dangers for man and environment

**GHS** label elements

Flammable.

R 10 Flammable. R 36/37 Irritating to eyes and respiratory system.

Warning

H226 - Flammable liquid and vapour.

Warning

Prevention:

H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Response:

P303+P301+P333 IF ON SKIN (or hair): Remove hake on immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 Store locked up.

Storage: P501 Dispose of contents/container in accordance with local/regional/national/international regulations. Disposal:

3 Composition/information on ingredients

Chemical characterization:

Designation: (CAS#)
Identification number(s): 2,4,5-Trimethyloxazole (CAS# 20662-84-4): 100%

**EINECS Number:** 243-952-4

4 First aid measures

After inhalation

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 skin contact

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

After eye contact After swallowing Seek immediate medical advice.

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) Wear self-contained breathing apparatus.

Protective equipment: Wear full protective suit.

6 Accidental release measures

Person-related safety precautions: Wear protective equipment. Keep unprotected persons away.

Keep away from ignition sources

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. Measures for environmental protection: Measures for cleaning/collecting:

Keep away from ignition sources.
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. 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:
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.

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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.
Do not inhale gases / furnes / aerosols.
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

Breathing equipment: Protection of hands: Material of gloves

Face protection
Protective work clothing. **Body protection:** 

#### 9 Physical and chemical properties:

General	Information	

Liquid Yellow Form: Colour: Pungent Smell:

Change in condition

Eve protection:

Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Not determined 133-134°C Not determined Flash point: 33°C Ignition temperature: Not determined

**Decomposition temperature:** Critical values for explosion:

Not determined Lower: Upper: Not determined Steam pressure at 20°C: 13 hPa

Density at 20°C

#### 10 Stability and reactivity

Thermal decomposition / conditions to be

avoided Materials to be avoided: No decomposition if used and stored according to specifications. Oxidizing agents

0.964 g/cm3

Not determined

Acids

Dangerous reactions: Dangerous products of decomposition:

No dangerous reactions known Carbon monoxide and carbon dioxide Nitrogen oxides (NOx)

### 11 Toxicological information

Acute toxicity: Primary irritant effect: on the skin:

on the eye: Sensitization:

May cause irritation Irritant effect

Additional toxicological information:

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)



ADR/RID-GGVS/E Class: Kemler Number: 3 (F1) Flammable liquids. 30

1993 **UN-Number:** Packaging group: Label 3

1993 FLAMMABLE LIQUID, N.O.S. (not viscous) (2,4,5-Trimethyloxazole)

Designation of goods: Limited quantities (LQ) Transport category

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GB

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(Contd. of page 2) D/E **Tunnel restriction code** 

Maritime transport IMDG/GGVSea:

IMDG/GGVSea Class: 3 1993 3 III UN Number: Label Packaging group: Marine pollutant: Correct technical name:

FLAMMABLE LIQUID, N.O.S. (2,4,5-Trimethyloxazole)

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: UN/ID Number: 3 1993 Label 3 III Packaging group: Correct technical name:

FLAMMABLE LIQUID, N.O.S. (2,4,5-Trimethyloxazole)

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

15 Regulatory information

Designation according to EC guidelines:

Code letter and hazard designation of

product:

Xi Irritant

Risk phrases: Flammable.

36/37 Irritating to eyes and respiratory system.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Safety phrases:

37 Wear suitable gloves.

**National regulations** 

Information about limitation of use:

For use only by technically qualified individuals. Employment restrictions concerning young persons must be observed. Water hazard class 1 (Self-assessment): slightly hazardous for water. Water hazard class:

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:
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 Martimer 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: T: 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)

Beautiful Transpont 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 National Agreement Concerning the International Carriage of Dangerous Goods Agreement Concerning the Int