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

Printing date 05.08.2010 Revision: 05.08.2010

1 Identification of substance

Product details

Trade name Ethyl (methylthio)acetate

Stock number:

B24285, L10341

Alfa Aesar GmbH & Co.KG Benzstrasse 3

D-76185 Karlsruhe / Germany

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

Manufacturer/Supplier:

Hazard designation:

Xi Irritant

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

Prevention: Response:

Warning H319 - Causes serious eye irritation.

R 36/37 Irritating to eyes and respiratory system.

H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Storage: Disposal:

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

3 Composition/information on ingredients

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

Ethyl (methylthio)acetate (CAS# 4455-13-4): 100%

224-700-2

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.

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

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

Seek immediate medical advice

5 Fire fighting measures

Suitable extinguishing agents 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) Wear self-contained breathing apparatus.

Protective equipment: Wear full protective suit.

6 Accidental release measures

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

Measures for environmental protection: Measures for cleaning/collecting:

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.

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

Additional information:

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.

Keep ignition sources away - Do not smoke.

Information about protection against explosions and fires:

Storage

Requirements to be met by storerooms and

containers: Information about storage in one common

No special requirements.

Store away from oxidizing agents.

storage facility: 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: 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.

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Wash hands during breaks and at the end of the work. Avoid contact with the eyes and skin.
Use breathing protection in case of insufficient ventilation.
Use breathing protection with high concentrations.

Breathing equipment:

Protection of hands: Material of gloves 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.

Penetration time of glove material

Eye protection:

Impervious gloves Not determined Safety glasses Face protection

Not determined

Not determined

Protective work clothing. **Body protection:**

9 Physical and chemical properties:

General Information

Form: Liquid Colourless Characteristic Colour: Smell:

Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Not determined 176°C (8 mmHg) Not determined Flash point: 59°C

Ignition temperature: **Decomposition temperature:**

Danger of explosion: Product is not explosive.

Critical values for explosion:

Lower: Upper: Not determined Not determined Not determined Steam pressure: Density at 20°C 1.06 g/cm3

Solubility in / Miscibility with Water

Not miscible or difficult to mix

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

Dangerous reactions:
Dangerous products of decomposition:

No dangerous reactions known Carbon monoxide and carbon dioxide Sulphur oxides (SOx)

11 Toxicological information

Acute toxicity: Primary irritant effect: on the skin:

on the eye: Sensitization:

Additional toxicological information:

Irritant for skin and mucous membranes.

Initial for skill and fluctus membranes.

Irritant effect.

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:

Generally not hazardous for water. 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: Disposal must be made according to official regulations. Recommendation

14 Transport information

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

ð

3 (F1) Flammable liquids. 30

ADR/RID-GGVS/E Class: Kemler Number: 3272 III UN-Number: Packaging group: Label

3272 ESTERS, N.O.S. (Ethyl (methylthio)acetate) LQ7

Designation of goods: Limited quantities (LQ) Transport category Tunnel restriction code J/E

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Trade name Ethyl (methylthio)acetate

Maritime transport IMDG/GGVSea:

IMDG/GGVSea Class: UN Number: Label 3 III

Packaging group: EMS Number: Marine pollutant: . -E.S-D

ESTERS, N.O.S. (Ethyl (methylthio)acetate) Correct technical name:

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: UN/ID Number: 3 3272 Label
Packaging group:
Correct technical name: 3 |||

ESTERS, N.O.S. (Ethyl (methylthio)acetate)

UN "Model Regulation":

UN3272, ESTERS, N.O.S., 3, III

15 Regulatory information

Designation according to EC guidelines:

Code letter and hazard designation of

product:

Xi Irritant

Risk phrases: 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:

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: 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:
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 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 Mir 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)