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

Printing date 21.07.2010 Revision: 21.07.2010

1 Identification of substance

Product details

Trade name 1-Methylcyclopentene

Stock number:

A18816, L06325

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:

F Highly flammable

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

R 11 Highly flammable.

Danger

H225 - Highly flammable liquid and vapour. Prevention:

H225 - Highly flammable liquid and vapour.
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations. Response:

Disposal:

3 Composition/information on ingredients

Chemical characterization: Designation: (CAS#) Identification number(s): 1-Methylcyclopentene (CAS# 693-89-0): 100%

EINECS Number: 211-762-0

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

Seek immediaté medical advice After swallowing

5 Fire fighting measures

Protective equipment:

Suitable extinguishing agents Use carbon dioxide, extinguishing powder or foam. Water may be ineffective but may be used for cooling exposed containers.

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 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:

Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Keep away from ignition sources
Do not allow material to be released to the environment without proper governmental permits. 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.

Do not flush with water or aqueous cleansing agents
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. 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:

Store in cool location.

Store away from oxidizing agents.

Protect from heat.

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

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

Breathing equipment: Protection of hands: 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.

Eye protection:

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

9 Physical and chemical properties:

General Information Liquid Colourless Form: Colour: Not determined Smell:

Change in condition

Not determined 71-73°C (754mm Hg) Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Not determined

Flash point: -17°C

Ignition temperature: Not determined **Decomposition temperature:** Not determined

Critical values for explosion:

Not determined Lower: Upper: Not determined Steam pressure: Not determined 0.78 g/cm³ Density at 20°C

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 Heat

Dangerous reactions:

No dangerous reactions known Dangerous products of decomposition: Carbon monoxide and carbon dioxide

11 Toxicological information

Acute toxicity: Primary irritant effect: on the skin:

Irritant for skin and mucous membranes.

on the eye: Sensitization: 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: 3 (F1) Flammable liquids. Kemler Number: UN-Number: 33 3295 Packaging group:

.3 3295 HYDROCARBONS, LIQUID, N.O.S. (vapor pressure at 50°C at most 110 kPa) Label Designation of goods:

Limited quantities (LQ)
Transport category
Tunnel restriction code LQ4 D/E

Maritime transport IMDG/GGVSea:

IMDG/GGVSea Class: 3 3295 UN Number: Label

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Trade name 1-Methylcyclopentene

Packaging group: Marine pollutant: II No

Correct technical name: HYDROCARBONS, LIQUID, N.O.S

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: UN/ID Number: 3 3295 Label

Packaging group: Correct technical name: HYDROCARBONS, LIQUID, N.O.S.

UN "Model Regulation":

UN3295, HYDROCARBONS, LIQUID, N.O.S., 3, II

F Highly flammable

15 Regulatory information

Designation according to EC guidelines: Code letter and hazard designation of product:

11 Highly flammable. Risk phrases:

Safety phrases:

Keep container tightly closed.
 Take precautionary measures against static discharges.
 This material and its container must be disposed of as hazardous waste.

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: 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.

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 RID: Règlement international Maritime Code for Dangerous Goods
IATA-DRI Andritime Code for Dangerous Goods
IATA-DRI International Air Transport Association
IATA-DRIS: 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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