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

Printing date 09.08.2010 Revision: 09.08.2010

1 Identification of substance

Product details

Trade name Vinylcyclopentane

Stock number:

H26230

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG

Benzstrasse 3 D-76185 Karlsruhe / Germany

Product safety department.

Informing 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:

F Highly flammable

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

Response:

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.

Disposal:

3 Composition/information on ingredients

Chemical characterization:

Designation: (CAS#)
Identification number(s): Vinylcyclopentane (CAS# 3742-34-5): 100%

EINECS Number: 223-133-8

4 First aid measures

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms After inhalation

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

After swallowing Seek immediaté medical advice

5 Fire fighting measures

Suitable extinguishing agents Special hazards caused by the material, its products of combustion or flue gases:

Protective equipment:

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
Wear self-contained breathing apparatus.

Wear full protective suit.

6 Accidental release measures

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation Keep away from ignition sources 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. Keep away from ignition sources. See Section 7 for information on safe handling See section 8 for information on personal protection equipment.

Additional information:

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.

Requirements to be met by storerooms and containers:

Information about storage in one common

storage facility: Further information about storage

conditions:

Store in cool location.

Store away from oxidizing agents.

Keep container tightly sealed. Refrigerate

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:

Personal protective equipment General protective and hygienic measures

Not required. No data

The usual precautionary measures should be adhered to in handling the chemicals. Keep away from foodstuffs, beverages and food.

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Breathing equipment: Protection of hands: Material of gloves

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.

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.

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

9 Physical and chemical properties:

General Information Form: Liquid Smell: Not determined Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Not determined Not determined 10°C Flash point:

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

Critical values for explosion:

Lower: Not determined Upper Not determined Steam pressure: Not determined Density at 20°C 0.704 g/cm3

10 Stability and reactivity

Thermal decomposition / conditions to be

avoided:

Materials to be avoided: Oxidizing agents No dangerous reactions known Dangerous reactions: Dangerous products of decomposition: Carbon monoxide and carbon dioxide

11 Toxicological information

Acute toxicity: Primary irritant effect: on the skin:

on the eye: Sensitization:

Additional toxicological information:

Irritant for skin and mucous membranes.

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

Irritant effect.

12 Ecological information:

Additional ecological information:

General notes:

No decomposition if used and stored according to specifications.

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. 33 3295 ADR/RID-GGVS/E Class:

Kemler Number: UN-Number: Packaging group: Label

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

Maritime transport IMDG/GGVSea:

3 3295 3 II IMDG/GGVSea Class: UN Number: Label Packaging group: Marine pollutant:

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

Air transport ICAO-TI and IATA-DGR:

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

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

UN "Model Regulation": UN3295, HYDROCARBONS, LIQUID, N.O.S., 3, II

15 Regulatory information

Designation according to EC guidelines:

Code letter and hazard designation of product:

F Highly flammable

Risk phrases: 11 Highly flammable.

Safety phrases: 33 Take precautionary measures against static discharges.

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:

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:

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: Réglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International IMDE; International Martime Code for Dangerous Goods National Air Transport of 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: The Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

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