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

Printing date 22.08.2010 Revision: 22.08.2010

1 Identification of substance

Product details

Trade name 1-Hexyn-3-ol

Stock number:

L11549

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:

T+ Very toxic

Information pertaining to particular dangers

for man and environment

GHS label elements

Response:

R 10 Flammable. R 25 Toxic if swallowed. R 27 Very toxic in contact with skin.

Danger

H301 - Toxic if swallowed. H310 - Fatal in contact with skin.

Warning

Prevention:

H226 - Flammable liquid and vapour.
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P361 Remove/Take off immediately all contaminated clothing.

P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations. Storage: Disposal:

3 Composition/information on ingredients

Chemical characterization: Designation: (CAS#) 1-Hexyn-3-ol Identification numbér(s): 203-286-7 **EINECS Number:**

4 First aid measures

General information

Instantly remove any clothing soiled by the product. In case of irregular breathing or respiratory arrest provide artificial respiration. Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms After inhalation

After skin contact

persist.
Seek immediate medical advice.
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. Do not induce vomiting; instantly call for medical help. 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 Wear self-contained breathing apparatus. Wear full protective suit.

Protective equipment:

6 Accidental release measures

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

Keep away from ignition sources

Measures for environmental protection: Measures for cleaning/collecting:

neep 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). Dispose of contaminated material as waste according to item 13.

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.

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. Store in a locked cabinet or with access restricted to technical experts or their assistants.

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(Contd. of page 1)

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. Wash hands during breaks and at the end of the work. Store protective clothing separately. 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. Impervious gloves

Breathing equipment: Protection of hands:

Material of gloves

Penetration time of glove material Eye protection:

Impervious gloves Not determined Safety glasses
Face protection
Protective work clothing.

Body protection:

9 Physical and chemical properties:

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Liquid Colourless Form: Colour: Recognizable Smell:

Change in condition

Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Not determined 142-143°C Not determined Flash point: 47°C Not determined

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

Critical values for explosion:

Not determined Lower: Upper: Not determined Steam pressure: Not determined 0.872 a/cm3 Density at 20°C

Solubility in / Miscibility with

Water:

Slightly soluble

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 Acids Heavy metal powders

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

11 Toxicological information

Acute toxicity:

LD/LC50 values that are relevant for classification:

LD50 126 mg/kg (rat) Oral

Dermal LD50 15.8 mg/kg (rabbit)

Primary irritant effect:

May cause irritation on the skin: on the eye: Sensitization:

Additional toxicological information:

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.

Danger by skin resorption.

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:

Do not allow product to reach ground water, water bodies or sewage system. Water hazard class 2 (Self-assessment): hazardous for water. Danger to drinking water if even small quantities leak into soil. Do not allow material to be released to the environment without proper governmental permits.

13 Disposal considerations

Product:

Recommendation

Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations. Consult state, local or national regulations for proper disposal.

Uncleaned packagings:

Disposal must be made according to official regulations. Recommendation:

(Contd. on page 3)

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(Contd. of page 2)

14 Transport information

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

ADR/RID-GGVS/E Class: Kemler Number: 6.1 (TF1) Toxic substances.

UN-Number: 2929 Packaging group: Label

2929 TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S. (1-Hexyn-3-ol) LQ0

Designation of goods: Limited quantities (LQ) Transport category Ċ/D Tunnel restriction code

Maritime transport IMDG/GGVSea:

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IMDG/GGVSea Class: UN Number: 6.1 2929 Label Packaging group: EMS Number: 6.1+3 F-E,S-D

Marine pollutant: TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S. (1-Hexyn-3-ol) Correct technical name:

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: 6.1 UN/ID Number: 2929 Label Packaging group: Correct technical name: 6.1 + 3

TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S. (1-Hexyn-3-ol)

UN "Model Regulation": UN2929, TOXIC LIQUID, FLAMMABLE, ORGANIC, N.O.S., 6.1 (3), I

15 Regulatory information

Designation according to EC guidelines:

Code letter and hazard designation of

product:

T+ Very toxic

Risk phrases: 10 Flammable.

25 Toxic if swallowed. 27 Very toxic in contact with skin.

Safety phrases:

After contact with skin, wash immediately with plenty of water.

36/37 Wear suitable protective clothing and gloves.
In case of accident or if you feel unwell, seek medical advice immediately (show the label where

possible).

National regulations

Employment restrictions concerning young persons must be observed. For use only by technically qualified individuals. Information about limitation of use:

Water hazard class: Water hazard class 2 (Self-assessment): 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 Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

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)

LC50: Lethal concentration, 50 percent

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