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Printing date 11.08.2010 Revision: 11.08.2010

1 Identification of substance

**Product details** 

(R)-1-Benzyl-3-hydroxypiperidine Trade name

Stock number:

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:

Xi Irritant

Information pertaining to particular dangers

for man and environment

**GHS** label elements

Prevention:

R 36/37/38 Irritating to eyes, respiratory system and skin.

Warning

H315 - Causes skin irritation.

Response:

H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 Specific treatment (see on this label).

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

Storage:

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

3 Composition/information on ingredients

Chemical characterization: Designation: (CAS#)

(R)-1-Benzyl-3-hydroxypiperidine (CAS# 91599-81-4): 100%

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

Can be released in case of fire:

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:

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.

Measures for environmental protection:

Ensure adequate ventilation

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. Measures for cleaning/collecting:

Additional information:

7 Handling and storage

Handling Information for safe handling:

Handle under dry protective gas. 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

storage facility:

No special requirements.

Store away from air. Store away from oxidizing agents.

Further information about storage

conditions:

Store under dry inert gas. Keep container tightly sealed. This product is air sensitive. 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.

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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

Breathing equipment: Protection of hands: Material of gloves

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.
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

Penetration time of glove material

Eye protection: **Body protection:**  Impervious gloves Not determined Safety glasses Face protection Protective work clothing.

9 Physical and chemical properties:

**General Information** 

Form: Viscous liquid Colour: Yellow Orange

Smell-Not determined

Change in condition Melting point/Melting range: Boiling point/Boiling range: Not determined Not determined Sublimation temperature / start: Not determined Flash point: Not determined

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

Danger of explosion: Product is not explosive.

Critical values for explosion:

Not determined Lower: Upper: Not determined Steam pressure: Not determined Density Not determined

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:** 

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

Nitrogen oxides (NOx)

11 Toxicological information

Acute toxicity: Primary irritant effect: on the skin:

Irritant for skin and mucous membranes. on the eye:

Irritant effect.

Sensitizátion: 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

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

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:

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 None

Maritime transport IMDG/GGVSea: IMDG/GGVSea Class: Marine pollutant: None No

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

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Air transport ICAO-TI and IATA-DGR: ICAO/IATA Class:

None

Transport/Additional information: Not dangerous according to the above specifications.

15 Regulatory information

Designation according to EC guidelines:

Code letter and hazard designation of

product:

Xi Irritant

Risk phrases: 36/37/38 Irritating to eyes, respiratory system and skin.

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: 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.

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 IMTA: International Air Transport Association

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

ICAO: International Civil Aviation Organization

ICAO: T1: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

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

GB