E-mail: gcat@matthey.com www.alfa-chemcat.com

Printing date 11.08.2010 Revision: 11.08.2010

1 Identification of substance

Product details

Cycloheptene Trade name

Stock number:

Manufacturer/Supplier: Alfa Aesar GmbH & Co.KG

Benzstrasse 3

D-76185 Karlsruhe / Germany

Informing department: Product safety department.

Emergency information: Giftnotruf Universität Mainz / Poison Information Center Mainz

H29062

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

Prevention:

Response:

R 11 Highly flammable.

Danger

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#) Cycloheptene (CAS# 628-92-2): 100%

Identification number(s): EINECS Number: 211-060-4

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

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

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:

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

Person-related safety precautions: 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. 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.

See Section 13 for information on disposal.

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.

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: Further information about storage

conditions:

Store in cool location.

Store away from oxidizing agents.

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:

Not required.

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Additional information:

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.

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 Protective work clothing.

Body protection:

9 Physical and chemical properties:

General Information

Form: Liquid Colourless Pale yellow Colour: Smell: Not determined

Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:

Flash point: Ignition temperature:

Decomposition temperature: Critical values for explosion: Lower: Upper:

Steam pressure: Density at 20°C

Solubility in / Miscibility with Water:

Not determined Not determined Not determined

Not determined

Not determined 112-115°C Not determined

-7°C

Not determined 0.833 g/cm3

Not miscible or difficult to mix

10 Stability and reactivity

Thermal decomposition / conditions to be avoided:

Materials to be avoided:

Dangerous reactions:

Dangerous products of decomposition:

No decomposition if used and stored according to specifications.

Oxidizing agents

No dangerous reactions known Carbon monoxide and carbon dioxide

11 Toxicological information

Acute toxicity:

Primary irritant effect: on the skin:

on the eye Sensitization: Irritant for skin and mucous membranes. 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:

Generally not hazardous for water.

Do not allow material to be released to the environment without proper governmental permits.

13 Disposal considerations

Product:

Hand over to disposers of hazardous waste. Recommendation

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:

14 Transport information

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

3

ADR/RID-GGVS/E Class: 3 (F1) Flammable liquids.

Kemler Number: UN-Number: Packaging group: l abel

3 22<u>42 CYCLOHEPTENE</u> Designation of goods:

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

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Trade name Cycloheptene		
		(Contd. of page 2)
Limited quantities (LQ) Tunnel restriction code	LQ4 D/E	

Limited quantities (LQ) Tunnel restriction code Maritime transport IMDG/GGVSea:

IMDG/GGVSea Class: 3 2242 UN Number: Packaging group: Marine pollutant: Correct technical name: Nο

CYCLOHEPTENE

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: 3 2242 UN/ID Number:

Packaging group: Correct technical name: **CYCLOHEPTENE**

UN "Model Regulation":

UN2242, CYCLOHEPTENE, 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.

33 Take precautionary measures against static discharges. 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 RID: Règlement international Martime Code for Dangerous Goods
IATA: International Martime 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-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)