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

Printing date 24.08.2010 Revision: 24.08.2010

1 Identification of substance

Product details

Trade name (+/-)-2-Chloro-1-phenylethanol

Stock number:

Alfa Aesar GmbH & Co.KG Manufacturer/Supplier:

Benzstrasse 3 D-76185 Karlsruhe / Germany

Product safety department. Informing department:

Giftnotruf Universität Mainz / Poison Information Center Mainz www.giftinfo.uni-mainz.de Telefon:+49(0)6131/19240 **Emergency information:**

2 Hazards identification

Hazard designation:

Xn Harmful

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

R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed. Warning

H302 - Harmful if swallowed. H312 - Harmful in contact with skin. H332 - Harmful if inhaled.

Response:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P322 Specific measures (see on this label).

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

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

3 Composition/information on ingredients

Chemical characterization: Designation: (CAS#)
Identification number(s):

(+/-)-2-Chloro-1-phenylethanol (CAS# 1674-30-2): 100%

216-816-7 **EINECS Number:**

4 First aid measures

Prevention:

Disposal:

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

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:

Can be released in case of fire: Carbon monoxide and carbon dioxide
Hydrogen chloride (HCl)
Wear self-contained breathing apparatus.

Protective equipment:

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

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.

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.

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.

Storage 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.

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.

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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. Breathing equipment: Protection of hands: Material of gloves

Impervious gloves Penetration time of glove material Not determined

Eye protection: Body protection: Safety glasses
Protective work clothing.

9 Physical and chemical properties:

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

Change in condition
Melting point/Melting range:
Boiling point/Boiling range:
Sublimation temperature / start: Not determined 110-112°C (5 mmHg) Not determined

> 110°C Ignition temperature: Not determined

Decomposition temperature: Not determined

Product is not explosive Danger of explosion:

Critical values for explosion: Not determined Upper: Not determined

Steam pressure: Not determined Density at 20°C 1.193 g/cm³

Solubility in / Miscibility with 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
Hydrogen chloride (HCI)

11 Toxicological information

Acute toxicity:

Primary irritant effect: on the skin:

on the eye:

Sensitization: Additional toxicological information: Irritant for skin and mucous membranes.

Irritant effect.

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:

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: 6.1 (T1) Toxic substances.

Kemler Number: 2810 UN-Number: ĪΪ

Packaging group: Label

6.1 2810 TOXIC LIQUID, ORGANIC, N.O.S. ((+/-)-2-Chloro-1-phenylethanol) Designation of goods: Limited quantities (LQ)

Maritime transport IMDG/GGVSea:

IMDG/GGVSea Class:

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Trade name (+/-)-2-Chloro-1-phenylethanol

UN Number: Label 2810 6.1 []]

Packaging group: Marine pollutant: Correct technical name: No TOXIC LIQUID, ORGANIC, N.O.S. ((+/-)-2-Chloro-1-phenylethanol)

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: UN/ID Number: 6.1 2810 6.1 III Label Packaging group: Correct technical name:

TOXIC LIQUID, ORGANIC, N.O.S. ((+/-)-2-Chloro-1-phenylethanol)

UN "Model Regulation":

UN2810, TOXIC LIQUID, ORGANIC, N.O.S., 6.1, III

15 Regulatory information

Designation according to EC guidelines:

Code letter and hazard designation of

product:

Xn Harmful

Risk phrases: 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

9 Keep container in a well-ventilated place. 36/37 Wear suitable protective clothing and gloves. 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 1 (Self-assessment): slightly hazardous for water. Water hazard class:

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-DER Martime Code for Dangerous Goods

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

GAS: Ciobally 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)