Reviewed on 11/10/2008

1 Identification of substance:

Product details: Product name: Phenylacetaldehyde

Stock number:

L04286

A14263

Manufacturer/Supplier:

Alfa Aesar, A Johnson Matthey Company Johnson Matthey Catalog Company, Inc. 30 Bond Street Ward Hill, MA 01835-8099

Emergency Phone: (978) 521-6300

CHEMTREC: (800) 424-9300 Web Site: www.alfa.com Information Department: Health, Safety and Environmental Department Emergency information: During normal hours the Health, Safety and Environmental Department.

After normal hours call Chemtrec at (800) 424-9300. 2 Composition/Data on components: Chemical characterization:

Identification number(s): EINECS Number: 204-574-5

Phenylacetaldehyde (CAS# 122-78-1), 100%

3 Hazards identification Hazard description:

Xn Harmful

Information pertaining to particular dangers for man and environment

Description: (CAS#)

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

Classification system HMIS ratings (scale 0-4)

Health (acute effects) - I Flammability - I 1 FIRE

Reactivity - I REACTIVITY 1

4 First aid measures

After inhalation Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.

(Hazardous Materials Identification System)

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

Material Safety Data Sheet

acc. to OSHA and ANSI Reviewed on II/I0/2008 Printing date II/I0/2008 Product name: Phenylacetaldehyde

After swallowing Seek immediate medical advice.

In case of fire, the following can be released:

5 Fire fighting measures

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

Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Special hazards caused by the material, its products of combustion or

Suitable extinguishing agents

Carbon monoxide and carbon dioxide

Person-related safety precautions:

Ensure adequate ventilation

Wear fully protective impervious suit.

Measures for environmental protection:

See Section 7 for information on safe handling

Store in cool, dry place in tightly closed containers.

Requirements to be met by storerooms and receptacles:

Information about storage in one common storage facility:

Information about protection against explosions and fires:

See Section 13 for disposal information.

Wear self-contained respirator.

After eye contact

resulting gases:

Protective equipment:

governmental permits.

Additional information:

6 Accidental release measures

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

Information for safe handling: Keep container tightly sealed.

Measures for cleaning/collecting:

7 Handling and storage

Keep ignition sources away. Protect from heat. Protect against electrostatic charges.

Ensure good ventilation at the workplace.

Store away from oxidizing agents. Do not store together with alkalies (caustic solutions).

Printing date II/I0/2008

Components with

Breathing equipment:

General Information

Form:

Odor:

Colori

Flash point:

Ignition temperature:

Danger of explosion:

Density at 20°C (68°F):

Explosion limits: Lowers

Upper:

Vapor pressure:

specifications.

Oxidizing agents

Acute toxicity:

Oral

Materials to be avoided:

11 Toxicological information

Primary irritant effect:

12 Ecological information:

governmental permits.

13 Disposal considerations

General notes:

Recommendation

Printing date II/I0/2008

DOT regulations: Hazard class:

IMDG Class:

Hazard symbols: Xn Harmful

Inventory.

Contact: Paul V. Connolly

ADR/RID class: None Maritime transport IMDG:

Product name: Phenylacetaldehyde

Product:

on the eye: Irritating effect.

Subscute to chronic toxicity: Subacute to chronic toxicity:

Inhalative LC50 2000 mg/m3 (mouse)

Additional toxicological information:

water, water course or sewage system.

Dangerous reactions No dangerous reactions known

LD/LC50 values that are relevant for classification: LD50 3890 mg/kg (guinea pig)

> 3890 mg/kg (mouse) 1550 mg/kg (rat) LD50 >5000 mg/kg (rabbit)

on the skin: Irritant to skin and mucous membranes.

Phenylacetaldehyde is moderately toxic by ingestion.

Sensitization: No sensitizing effects known.

Decomposition temperature:

Additional information: No data Personal protective equipment

Not required.

Product name: Phenylacetaldehyde

No special requirements.

Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well sealed containers.

Additional information about design of technical systems:

8 Exposure controls and personal protection

Material Safety Data Sheet acc. to OSHA and ANSI

General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed.

Liquid

Colorless Not determined

87°C (189°F)

Not determined

Not determined

Not determined Not determined

Not determined

1.0272 g/cm3

explosion hazard.

Product does not present an

limit values that require monitoring at the workplace:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Eye protection: Safety glasses Body protection: Protective work clothing. 9 Physical and chemical properties:

Remove all soiled and contaminated clothing immediately.

Use suitable respirator when high concentrations are present.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Protection of hands: Impervious gloves

Change in condition Melting point/Melting range: Not determined Boiling point/Boiling range: 195-196°C (383-385°F) Sublimation temperature / start: Not determined

Material Safety Data Sheet acc. to OSHA and ANSI Printing date II/I0/2008 Product name: Phenylacetaldehyde Solubility in / Miscibility with Fully miscible 10 Stability and reactivity Thermal decomposition / conditions to be avoided:

Dangerous products of decomposition: Carbon monoxide and carbon dioxide

Danger through skin absorption. 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.

Do not allow undiluted product or large quantities of it to reach ground

Do not allow material to be released to the environment without proper

Consult state, local or national regulations to ensure proper disposal. (Contd. on page 5)

Uncleaned packagings: Recommendation: Disposal must be made according to official regulations. Recommended cleansing agent: Water, if necessary with cleansing agents. 14 Transport information

Not a hazardous material for transportation.

None Land transport ADR/RID (cross-border)

15 Regulations Product related hazard informations:

Risk phrases: Harmful if swallowed. Safety phrases:

36/37 Wear suitable protective clothing and gloves. National regulations

Information about limitation of use: For use only by technically qualified individuals.

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 MSDS: Health, Safety and Environmental Department.

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Air transport ICAO-TI and IATA-DGR: ICAO/IATA Class: None Transport/Additional information:

16 Other information:

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance

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(Contd. of page 1)

(Contd. on page 2)

Wear protective equipment. Keep unprotected persons away. Do not allow material to be released to the environment without proper

See Section 8 for information on personal protection equipment.

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Page 4/5 Reviewed on II/I0/2008 (Contd. of page 3) Decomposition will not occur if used and stored according to

Page 5/5 Material Safety Data Sheet acc. to OSHA and ANSI

Not dangerous according to the above specifications.

36/37/38 Irritating to eyes, respiratory system and skin. Keep container in a well-ventilated place.

Employers should use this information only as a supplement to other