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Printing date 14.07.2010 Revision: 14 07 2010

1 Identification of substance

Product details

Trade name 2-Nitrocinnamaldehyde

Stock number:

A10308, L05214

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

R $\frac{3}{6}$ /37/38 Irritating to eyes, respiratory system and skin.

2 Hazards identification Hazard designation:

Xi Irritant

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

Warning

H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
P280 Wear protective gloves.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

Prevention: Response:

and easy to do. Continue rinsing.

3 Composition/information on ingredients

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

2-Nitrocinnamaldehyde (CAS# 1466-88-2)

215-988-0

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.

After skin contact Seek immediate medical advice.

After eye contact After swallowing Rinse opened eye for several minutes under running water. Then consult doctor. 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
Nitrogen oxides (NOx)
Possibly Hydrogen cyanide (HCN)
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 Do not allow material to be released to the environment without proper governmental permits.

Measures for environmental protection:

Measures for cleaning/collecting:

Additional information:

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

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.

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:

No special requirements.

Store away from oxidizing agents. Store away from air.

Further information about storage

Store under dry inert gas.

Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
This product is air sensitive.

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. Avoid contact with the eyes and skin. Use breathing protection with high concentrations.

Breathing equipment:

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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.

Safety glasses
Face protection
Protective work clothing.

Eve protection:

Body protection:

9 Physical and chemical properties:

General Information Form:

Solid. Characteristic Smell: 125-129°C

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

Decomposition temperature: Danger of explosion: Product is not explosive

Critical values for explosion:

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

Solubility in / Miscibility with Insoluble

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

Not determined

Air
No dangerous reactions known
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)
Possibly Hydrogen cyanide (HCN) **Dangerous reactions:** Dangerous products of decomposition:

11 Toxicological information

Acute toxicity: Primary irritant effect: on the skin:

on the eye: Sensitization

Additional toxicological information:

Irritant for skin and mucous membranes.

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

Irritant effect.

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

Uncleaned packagings:

Recommendation Disposal must be made according to official regulations.

None

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: No

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. 37 Wear suitable gloves. Safety phrases:

National regulations

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

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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:
Contact:
Abbreviations and acronyms:

Health, Safety and Environmental Department.
Zachariah Holt
ADR: Accord européen sur le transport des marchandises de la Dandereus Coolé by Pagal 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 Air Transport Association

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

ICAC: International Civil Aviation Organization

ICAC-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)