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Printing date 22.08.2010 Revision: 22.08.2010

1 Identification of substance

Product details

Trade name 2-Ethoxyphenyl isocyanate

Stock number:

Alfa Aesar GmbH & Co.KG Manufacturer/Supplier:

Benzstrasse 3 D-76185 Karlsruhe / Germany

Informing department:

Product safety 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:

GHS label elements

Xn Harmful

Information pertaining to particular dangers

for man and environment

R 20/22 Harmful by inhalation and if swallowed. R 36/37/38 Irritating to eyes, respiratory system and skin. R 42 May cause sensitisation by inhalation.

Danger

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Warning

H302 - Harmful if swallowed. H332 - Harmful if inhaled. H335 - May cause respiratory irritation.

Warning
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H319 - Causes serious eye irritation.
P285 In case of inadequate ventilation wear respiratory protection.
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).

Store locked up.

Storage:

Disposal:

3 Composition/information on ingredients

Chemical characterization: Designation: (CAS#)

2-Ethoxyphenyl isocyanate (CAS# 5395-71-1): 100%

4 First aid measures

Prevention: Response:

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

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 For safety reasons unsuitable extinguishing

agents Special hazards caused by the material, its

products of combustion or flue gases:

CO2, sand, extinguishing powder. Do not use water.

Water.

Can be released in case of fire: Can be released in case of fire:
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)
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.

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. Measures for environmental protection: Measures for cleaning/collecting:

Additional information:

Keep ignition sources away - Do not smoke.

7 Handling and storage

Handling Information for safe handling:

Handle under dry protective gas. Keep containers tightly sealed. Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.

Information about protection against explosions and fires:

Storage

Requirements to be met by storerooms and

containers: Information about storage in one common

storage facility:

Further information about storage conditions:

Refrigerate

Protect from heat. Store away from water. Store away from oxidizing agents.

Store under dry inert gas. This product is moisture sensitive.

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

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Keep container tightly sealed. Protect from humidity and keep away from water.

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.

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

9 Physical and chemical properties:

General Information

Form: Colour: Liquid Colourless Smell: Pungent

Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Not determined 119-120°C Not determined Flash point: 102°C (20mm Hg) Ignition temperature: Not determined

Decomposition temperature: Not determined Danger of explosion: Product is not explosive.

Critical values for explosion:

Lower: Not determined Upper: Not determined Steam pressure: Not determined Density at 20°C 1.105 g/cm3

Solubility in / Miscibility with

Water:

10 Stability and reactivity

Thermal decomposition / conditions to be avoided:

Materials to be avoided:

No decomposition if used and stored according to specifications.

Water/moisture Alcohols Amines Oxidizing agents

Hydrolyzes

Dangerous reactions:

Dangerous products of decomposition:

No dangerous reactions known Carbon monoxide and carbon dioxide Nitrogen oxides (NOx)

Hydrogen cyanide (prussic acid)

11 Toxicological information

Acute toxicity: Primary irritant effect: on the skin:

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

Lachrymatory effect.

Sensitization possible by inhalation.

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

Sensitisation May cause sensitisation by inhalation.

12 Ecological information:

Additional ecological information: General notes: 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.

GB (Contd. on page 3) Safety Data Sheet according to 1907/2006/EC, Article 31

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14 Transport information

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

ADR/RID-GGVS/E Class: Kemler Number: 6.1 (T1) Toxic substances.

60 2206 UN-Number: Packaging group: Label

2206 III 6.1 2206 ISOCYANATES, TOXIC, N.O.S. (2-Ethoxyphenyl isocyanate) LQ7 2 E

Designation of goods: Limited quantities (LQ) Transport category Tunnel restriction code

Maritime transport IMDG/GGVSea:

IMDG/GGVSea Class: UN Number: 6.1 2206 Label Packaging group: EMS Number: 6.1 III -A,S-A

Marine pollutant:

Correct technical name: ISOCYANATES, TOXIC, N.O.S. (2-Ethoxyphenyl isocyanate)

Air transport ICAO-TI and IATA-DGR:

6.1 2206 6.1 III ICAO/IATA Class: UN/ID Number: Label Packaging group: Correct technical name:

ISOCYANATES, TOXIC, N.O.S. (2-Ethoxyphenyl isocyanate)

UN "Model Regulation":

UN2206, ISOCYANATES, TOXIC, 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: Harmful by inhalation and if swallowed.

36/37/38 Irritating to eyes, respiratory system and skin.
42 May cause sensitisation by inhalation.

Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer). In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing and gloves. In case of accident or if you feel unwell, seek medical advice immediately (show the label where Safety phrases:

36/37

possible).

National regulations

Employment restrictions concerning young persons must be observed. For use only by technically qualified individuals. Information about limitation of use:

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: Réglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Maritime 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

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