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Printing date 14.07.2010 Revision: 14.07.2010

1 Identification of substance

Product details

Trade name 2,3-Diethylpyrazine

Stock number:

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG Benzstrasse 3

D-76185 Karlsruhe / Germany

Product safety department.

Informing department: Emergency information:

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

2 Hazards identification

Hazard designation:

Xi Irritant

Information pertaining to particular dangers for man and environment

GHS label elements

R 36/37/38 Irritating to eyes, respiratory system and skin. Warning

Prevention:

Response:

H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
P261 Avoid breathing dust/furme/gas/mist/vapours/spray.
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).
P405 Store locked up

P405 Store locked up.

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

3 Composition/information on ingredients

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

2,3-Diethylpyrazine (CAS# 15707-24-1)

EINECS Number: 239-800-1

4 First aid measures

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. Seek immediate medical advice. After inhalation

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 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) 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

Measures for environmental protection: Measures for cleaning/collecting:

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).
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.

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.

Storage Requirements to be met by storerooms and containers:

Information about storage in one common

Store away from oxidizing agents.

No special requirements.

storage facility: Further information about storage

conditions:

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. Wash hands during breaks and at the end of the work.

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

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Trade name 2,3-Diethylpyrazine

Do not inhale gases / fumes / aerosols.

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 Eye protection:

Not determined Safety glasses Face protection Protective work clothing.

Liquid Colourless Stench

71°C

Not determined 180-182°C Not determined

Not determined

Not determined

Not determined

Not determined

Not determined

0.963 g/cm3

Product is not explosive

Body protection:

Form: Colour:

9 Physical and chemical properties: **General Information**

Smell: Change in condition

Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Flash point:

Ignition temperature: **Decomposition temperature:** Danger of explosion:

Critical values for explosion: Lower Upper:

Steam pressure: Density at 20°C

10 Stability and reactivity

Thermal decomposition / conditions to be avoided:

Materials to be avoided:

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. Irritant effect.

Nitrogen oxides (NOx)
Hydrogen cyanide (prussic acid)

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:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

No decomposition if used and stored according to specifications. Oxidizing agents
No dangerous reactions known
Carbon monoxide and carbon dioxide

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:
None

Maritime transport IMDG/GGVSea: IMDG/GGVSea Class: None 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

36/37/38 Irritating to eyes, respiratory system and skin. Risk phrases:

Safety phrases:

23 Do not breathe fumes.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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

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Trade name 2,3-Diethylpyrazine

37 Wear suitable gloves.

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National regulations

Information about limitation of use:

Employment restrictions concerning young persons must be observed. For use only by technically qualified individuals.

Water hazard class: Water hazard class 1 (Self-assessment): slightly 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:
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: Reglement international Concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDS: 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 CAO: Tile 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)

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ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods National Agreement Concerning the International Carriage of Dangerous Goods by Rail IMDS: Carriage Agreement Concerning the International Carriage of Dangerous Goods by Rail IMDS: Carriage Agreement Concerning the International

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