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

Printing date 18.08.2010 Revision: 18.08.2010

1 Identification of substance

Product details

Trade name 1-Boc-imidazole

Stock number:

L00506

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

H315 - Causes skin irritation.

Prevention:

Response:

P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations. Storage: Disposal:

3 Composition/information on ingredients

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

tert-Butyl imidazole-1-carboxylate (CAS# 49761-82-2): 100%

276-475-1

4 First aid measures

After skin contact

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. 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)
Hydrogen cyanide (HCN)
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: Additional information:

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation

Do not allow material to be released to the environment without proper governmental permits.

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.

Keep ignition sources away - Do not smoke.

7 Handling and storage

Handling Information for safe handling:

Keep containers tightly sealed. Ensure good ventilation/exhaustion at the workplace.

Information about protection against explosions and fires:

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.

Keep container tightly sealed. 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.

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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

Penetration time of glove material

Eye protection:

Impervious gloves Not determined Safety glasses Face protection

Body protection: Protective work clothing.

9 Physical and chemical properties:

General Information

Form: Crystalline powder White Not determined Colour: Smell:

Change in condition

Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: 44-48°C Not determined Not determined Flash point: > 110°C Ignition temperature: Not determined

Decomposition temperature: Danger of explosion:

Critical values for explosion:

Upper: Steam pressure:

Not determined Density Not determined

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 Acids

Not determined

Not determined

Not determined

Product is not explosive.

Heat

Dangerous reactions: Dangerous products of decomposition:

No dangerous reactions known Carbon monoxide and carbon dioxide Nitrogen oxides (NOx) Hydrogen cyanide (prussic acid)

Irritant for skin and mucous membranes.

11 Toxicological information

Acute toxicity:

Primary irritant effect: on the skin: on the eye:

Sensitizátion:

Irritant effect.

Additional toxicological information:

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.

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: Marine pollutant:

None 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.

36/37/38 Irritating to eyes, respiratory system and seek.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

(Contd. on page 3) Safety phrases:

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37 Wear suitable gloves.

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National regulations

Water hazard class:

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.

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 Transport of Dangerous Goods by Rail)

IMDe: International Martitume Code for Dangerous Goods

IATA: International Air Transport Association

IATA: International Air Transport Association

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

ICAO: International Civil Aviation Organization

ICAO: International Civil Aviation Organization

ICAO: International 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)