Safety data sheet according to 1907/2006/EC, Article 31

Printing date 02.07.2013 Revision: 17.10.2008

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

3-(Trifluoromethoxy)benzeneboronic acid L19775 179113-90-7

1.1 Product identified
Trade name
Stock number:
CAS Number:
179113-90-7
1.2 Relevant identified uses of the substance or mixture and uses advised against.
SU24 Scientific research and development

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG A Johnson Matthey Company Zeppelinstr. 7b 76185 Karlsruhe / Germany Tel: +49 (0) 721 84007 280 Fax: +49 (0) 721 84007 300 Email: tech@alfa.com www.alfa.com

Informing department:

www.alia.com Product safety Tel + +049 (0) 7275 988687-0 Carechem 24: +44 (o) 1235 239 670 (Multi-language emergency number) Poison Information Center Mainz www.giftinfo.uni-mainz.de Telephone: +49(0)6131/19240 1.4 Emergency telephone number:

No information known.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008

. GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation. STOT SE 3 H335 May cause respiratory irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin. Information concerning particular hazards for human and environment: Not applica Not applicable Other hazards that do not result in

classification

2.2 Label elements Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms Signal word

Hazard statements

Precautionary statements

GHS07
Warning
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H319 Cause respiratory irritation.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P321 Specific treatment (see on this label).
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards Results of PBT and vPvB assessment

PBT: vPvB:

Not applicable. Not applicable.

SECTION 3: Composition/information on ingredients 3.1 Substances

CAS# Designation: 179113-90-7 3-(Trifluoromethoxy)benzeneboronic acid

SECTION 4: First aid measures

4.1 Description of 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.

Seek immediate medical advice.

After skin contact

After eve contact

After swallowing

4.2 Most important symptoms and effects, both acute and delayed
4.3 Indication of any immediate medical attention and special treatment needed

Rinse opened eye for several minutes under running water. Then consult doctor. Seek medical treatment.

No further relevant information available. No further relevant information available

SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing agents 5.2 Special hazards arising from the substance or mixture

CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

If this product is involved in a fire, the following can be released: Carbon monoxide and carbon dioxide Boron oxide

Hydrogen fluoride (HF) 5.3 Advice for firefighters

Protective equipment: Wear self-contained breathing apparatus. Wear full protective suit.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.2 Environmental 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. Do not allow product to reach sewage system or water bodies. Do not allow to enter the ground/soil.

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Trade name 3-(Trifluoromethoxy)benzeneboronic acid

6.3 Methods and material for containment

and cleaning up: Prevention of secondary hazards:

6.4 Reference to other sections

Ensure adequate ventilation.

No special measures required.
See Section 7 for information on safe handling
See section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

SECTION 7: Handling and storage

7.1 Precautions 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:

No information known. 7.2 Conditions for safe storage, including any incompatibilities Storage

Requirements to be met by storerooms and

containers:

Information about storage in one common

storage facility: Further information about storage

conditions:

7.3 Specific end use(s)

No special requirements.

Store away from oxidizing agents.

Keep container tightly sealed. Store in cool, dry conditions in well sealed containers.

No further relevant information available.

SECTION 8: Exposure controls/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.

8.1 Control parameters

Components with critical values that require monitoring at the workplace:
Additional information:

Not required. No data

8.2 Exposure controls

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.
Maintain an ergonomically appropriate working environment.
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.
Impervious gloves

Breathing equipment: Protection of hands:

Material of gloves Penetration time of glove material Impervious gloves Not determined Safety glasses Face protection Eye protection:

Protective work clothing. **Body protection:**

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:
Form:
Colour:
Smell: White

Not determined Odour threshold: Not determined pH-value: Not applicable.

Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:

Not determined Not determined

Product is not explosive.

Not applicable Flash point Inflammability (solid, gaseous) Not determined. Ignition temperature: Decomposition temperature: Not determined Not determined Self-inflammability: Not determined.

Danger of explosion: Critical values for explosion:

Lower: Upper: Not determined Not determined Steam pressure: Density Relative density Not applicable. Not determined Not determined. Vapour density Not applicable. Evaporation rate Solubility in / Miscibility with Not applicable. Insoluble Not determined. Water:

Partition coefficient (n-octanol/water):

Viscosity: dvnamic: ínematic

Not applicable. No further relevant information available 9.2 Other information

SECTION 10: Stability and reactivity

10.1 Reactivity 10.2 Chemical stability Thermal decomposition / conditions to be

avoided: 10.3 Possibility of hazardous reactions 10.5 Incompatible materials:

No information known.

Not applicable.

Stable under recommended storage conditions.

No decomposition if used and stored according to specifications. No dangerous reactions known Oxidizing agents

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10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

Boron oxide

Hydrogen fluoride

No effects known.

No data

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity:
LD/LC50 values that are relevant for classification:
Skin irritation or corrosion: Eye irritation or corrosion: Sensitization: Germ cell mutagenicity:

Carcinogenicity: Reproductive toxicity:

Specific target organ system toxicity -repeated exposure: Specific target organ system toxicity - single

exposure: Aspiration hazard:

Additional toxicological information:

EPA-I: Data are inadequate for an assessment of human carcinogenic potential. No effects known.

No effects known.

May cause respiratory irritation. No effects known.

Causes skin irritation.
Causes serious eye irritation.
No sensitizing effect known.
No effects known.

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

SECTION 12: Ecological information

12.1 Toxicity
Aquatic toxicity:
12.2 Persistence and degradability
12.3 Bioaccumulative potential

12.4 Mobility in soil
Additional ecological information:

General notes:

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

Generally not hazardous for water.
Avoid transfer into the environment.

No further relevant information available No further relevant information available. No further relevant information available. No further relevant information available.

12.5 Results of PBT and vPvB assessment

Not applicable.

PBT: vPvB: 12.6 Other adverse effects Not applicable. No further relevant information available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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.

None

None

Uncleaned packagings: Recommendation:

Disposal must be made according to official regulations.

SECTION 14: Transport information

ADR, IMDG, IATA

14.2 UN proper shipping name ADR, IMDG, IATA

14.3 Transport hazard class(es)

ADR, IMDG, IATA

UN-Number

Class

None

Packing group ADR, IMDG, IATA

None 14.5 Environmental hazards: Not applicable.

Not applicable

14.6 Special precautions for user 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC

Code

Transport/Additional information:

Not applicable.

Not dangerous according to the above specifications.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Australian Inventory of Chemical

Substances Standard for the Uniform Scheduling of

Substance is not listed.

Substance is not listed.

Substance is not listed.

Drugs and Poisons National regulations Information about limitation of use:

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

Water hazard class:

Other regulations, limitations and prohibitive regulations ELINCS (European List of Notified Chemical

Substances)

Substances of very high concern (SVHC) according to REACH, Article 57 REACH - Pre-registered substances

15.2 Chemical safety assessment:

Generally not hazardous for water.

Substance is not listed. Substance is not listed.

A Chemical Safety Assessment has not been carried out.

SECTION 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.

Abbreviations and acronyms:

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

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ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

DE/E