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Printing date 22.08.2010 Revision: 22.08.2010

1 Identification of substance

Product details

Trade name 4-Bromo-2,6-dimethylphenyl isothiocyanate

Stock number:

Alfa Aesar GmbH & Co.KG Benzstrasse 3 Manufacturer/Supplier:

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:

C Corrosive

Information pertaining to particular dangers

for man and environment

GHS label elements

Warning

R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed. R 34 Causes burns.

Danger

H314 - Causes severe skin burns and eye damage.

H302 - Harmful if swallowed. H312 - Harmful in contact with skin. H332 - Harmful if inhaled.

Prevention:

Response:

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

P305+P351+P358 If IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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:

4-Bromo-2,6-dimethylphenyl isothiocyanate (CAS# 32265-82-0): 100% Designation: (CAS#)

4 First aid measures

General information

Instantly remove any clothing soiled by the product. Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms After inhalation

Seek immediate medical advice.

Instantly wash with water and soap and rinse thoroughly. Seek immediate medical advice. After skin contact

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 For safety reasons unsuitable extinguishing

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:

Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)
Hydrogen cyanide (HCN)
Sulphur oxides (SOx)
Hydrogen bromide (HBr)
Wear self-contained breathing apparatus.
Wear full protective suit

Protective equipment:

Wear full protective suit.

6 Accidental release measures

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation Person-related safety precautions:

Measures for environmental protection: Measures for cleaning/collecting:

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

Use neutralizing agent.
Dispose of contaminated material as waste according to item 13.

Dispose of contaminated material as waste according to item 15 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

Additional information:

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.

Requirements to be met by storerooms and containers:

storage facility:

Information about storage in one common

Further information about storage

conditions:

No special requirements.

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. Store in cool, dry conditions in well sealed containers. Protect from humidity and keep away from water. Store in a locked cabinet or with access restricted to technical experts or their assistants.

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. Check protective gloves prior to each use for their proper condition.

Breathing equipment: Protection of hands:

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. Material of gloves

Impervious gloves

Penetration time of glove material

Eye protection:

Not determined

Safety glasses
Tightly sealed safety glasses.
Face protection

Full face protection
Protective work clothing.

Body protection:

9 Physical and chemical properties: val lafav

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Crystalline Pale yellow Form: Colour: Smell: Irritant

Change in condition

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

Not determined Not determined Not applicable Not determined

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

Critical values for explosion: _ower:

Upper: Steam pressure:

Not determined Not determined Not determined

Not determined

Solubility in / Miscibility with Water

Hydrolyzes

10 Stability and reactivity

Thermal decomposition / conditions to be

Density

Materials to be avoided:

No decomposition if used and stored according to specifications.

Water/moisture Alcohols

Dangerous reactions:

Amines Oxidizing agents No dangerous reactions known

Dangerous products of decomposition:

Carbon monoxide and carbon dioxide Nitrogen oxides (NOx) Hydrogen cyanide (prussic acid) Sulphur oxides (SOx)

Hydrogen bromide

11 Toxicological information

Acute toxicity: Primary irritant effect: on the skin:

on the eye: Sensitizátion: Corrosive effect on skin and mucous membranes. Strong corrosive effect.

Additional toxicological information:

Strong corrosive effect.
No sensitizing effect known.
To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
Danger by skin resorption.
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
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.

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Must be specially treated under adherence to official regulations. Consult state, local or national regulations for proper disposal.

Uncleaned packagings:

Disposal must be made according to official regulations. Recommendation:

14 Transport information

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



ADR/RID-GGVS/E Class: Kemler Number: 8 (CT2) Corrosive substances. 86

2923 III UN-Number: Packaging group: Label

8+6.1 2923 CORROSIVE SOLID, TOXIC, N.O.S. (4-Bromo-2,6-dimethylphenyl isothiocyanate)

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

Maritime transport IMDG/GGVSea:



IMDG/GGVSea Class: UN Number: 8+6.1 III Label

Packaging group: EMS Number: -A,S-B Marine pollutant: Correct technical name:

. No. "CORROSIVE SOLID, TOXIC, N.O.S. (4-Bromo-2,6-dimethylphenyl isothiocyanate)

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: 8 2923 UN/ID Number: Label 8+6.1

Packaging group: Correct technical name: CORROSIVE SOLID, TOXIC, N.O.S. (4-Bromo-2,6-dimethylphenyl isothiocyanate)

UN "Model Regulation": UN2923, CORROSIVE SOLID, TOXIC, N.O.S., 8 (6.1), III

15 Regulatory information

Designation according to EC guidelines:

Code letter and hazard designation of

product:

C Corrosive

20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

Causes burns Risk phrases:

Causes burns.

 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Safety phrases:

National regulations

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

Employment réstrictions 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: Health, Safety and Environmental Department.

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 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)