Reviewed on 06/16/2009

Material Safety Data Sheet

acc. to OSHA and ANSI

Printing date 06/16/2009

1 Identification of substance:

Product details:

Product name: 3,5-Bis(bromomethyl)toluene

Stock number: A18002

Manufacturer/Supplier:

Alfa Aesar, A Johnson Matthey Company Johnson Matthey Catalog Company, Inc. 30 Bond Street Ward Hill, MA 01835-8099 Emergency Phone: (978) 521-6300 CHEMTREC: (800) 424-9300 Web Site: www.alfa.com

Information Department: Health, Safety and Environmental Department

Emergency information: During normal hours the Health, Safety and Environmental Department. After normal hours call Chemtrec at (800) 424-9300.

2 Composition/Data on components:

Chemical characterization: Description: (CAS#) 3,5-Bis(bromomethyl)toluene (CAS# 19294-04-3): 100%

3 Hazards identification

Hazard description:



C Corrosive

Information pertaining to particular dangers for man and environment R 34 Causes burns. Classification system HMIS ratings (scale 0–4) (Hazardous Materials Identification System)
HEALTH 2 Health (acute effects) = 2
FIRE 1 Flammability = 1
REACTIVITY 1
GHS label elements
Danger
3.2/1B - Causes severe skin burns and eye damage.
Prevention:
Do not breathe dust/fume/gas/mist/vapours/spray. Wash thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Specific treatment (see label).

Wash contaminated clothing before reuse. Storage:

Store locked up.

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

4 First aid measures

General information Immediately remove any clothing soiled by the product.

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(Contd. of page 1) After inhalation Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice. After skin contact Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice. After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor. After swallowing Seek immediate medical advice.

5 Fire fighting measures

Suitable extinguishing agents
Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or
alcohol resistant foam.
Special hazards caused by the material, its products of combustion or resulting gases:
In case of fire, the following can be released:
Carbon monoxide and carbon dioxide
Hydrogen bromide (HBr)
Protective equipment:
Wear self-contained respirator.
Wear fully protective impervious suit.

6 Accidental release measures

Person-related safety precautions: Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation Measures for environmental protection: Do not allow material to be released to the environment without proper governmental permits. Measures for cleaning/collecting: Use neutralizing agent. Dispose contaminated material as waste according to item 13. Ensure adequate ventilation. Additional information: See Section 7 for information on safe handling See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

Handling

Information for safe handling: Keep container tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation at the workplace. Information about protection against explosions and fires: Keep ignition sources away.

Storage
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Store away from oxidizing agents.
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 limit values that require monitoring at the workplace: Not required. Additional information: No data

Personal protective equipment

General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin. Breathing equipment: Use suitable respirator when high concentrations are present.

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Product name: 3,5-Bis(bromomethyl)toluene

(Contd. of page 2)
Protection of hands:
Impervious gloves
Check protective gloves prior to each use for their proper condition.
Material of gloves
The selection of suitable gloves not only depends on the material, but also on quality.
Quality will vary from manufacturer to manufacturer.
Eye protection:
Safety glasses
Tightly sealed goggles
Full face protection
Body protection: Protective work clothing.

9 Physical and chemical properties:

General Information	
Form: Odor:	Powder Not determined
Change in condition	Not determined
Sublimation temperature / start: Flash point:	Not determined Not applicable
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits: Lower: Upper:	Not determined Not determined
Vapor pressure:	Not determined
Density:	Not determined

10 Stability and reactivity

Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications. Materials to be avoided: Oxidizing agents Dangerous reactions No dangerous reactions known Dangerous products of decomposition: Carbon monoxide and carbon dioxide Hydrogen bromide

11 Toxicological information

Acute toxicity: Primary irritant effect: on the skin: Corrosive effect on skin and mucous membranes. Irritant to skin and mucous membranes. on the eye: Strong corrosive effect. Irritating effect. Lachrymatory effect. Sensitization: No sensitizing effects known. Subacute to chronic toxicity: Corrosive materials are acutely destructive to the respiratory tract, eyes, skin and digestive tract. Eye contact may result in permanent damage and complete vision loss. Inhalation may result in respiratory effects such as inflammation, edema, and chemical pneumonitis. May cause coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. Ingestion may cause damage to the mouth, throat and esophagus. May cause skin burns or irritation depending on the severity of the exposure. Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

Swallowing will lead to a strong corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach.

(Contd. on page 4)

USA

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Product name: 3,5-Bis(bromomethyl)toluene

(Contd. of page 3) No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

12 Ecological information:

General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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

13 Disposal considerations

Product:

Recommendation Consult state, local or national regulations to ensure proper disposal.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

Hazard class: 8 Identification number: UN1759 Packaing group: III Proper shipping name (technical name): CORNOSIVE SOLID, N.O.S. (3,5-Bis (bromomethyl)toluene) Land transport ADR/RID (cross-border) 8 MDR/RID class: 8 (C10) Corrosive substances Danger code (Kemler): 80 WN-Number: 1759 Packaging group: III Description of goods: 1759 CORROSIVE SOLID, N.O.S. (3,5-Bis (bromomethyl)) toluene) toluene) Maritime transport IMDG: III IMDG Class: 8 UN Number: 1759 Label 8 Packaging group: III Danger code (Kemler): 8 Packaging group: III Description of goods: 1759 IMDG Class: 8 Packaging group: 1759 Label 8 Packaging group: 1759 Label 8 Packaging group: 111		
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UN "Model Regulation": UN1759, CORROSIVE SOLID, N.O.S., 8, III

15 Regulations

Product related hazard informations:

Hazard symbols:

C Corrosive

Risk phrases:

34 Causes burns.

Safety phrases:

20 When using do not eat or drink.

In case of contact with eyes, rinse immediately with plenty of water and seek 26 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. 45

National regulations

This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only.

Some or all of the components of this product are not listed on the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL).

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

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 MSDS: Health, Safety and Environmental Department. Contact: Zachariah Holt Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) EID: Règlement 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 DOT: US Department of Transportation LOI: US Department of Transportation TATA: International Air Transport Association TATA-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)

HMIS: Hazardous Materials Identification System (USA)

USA