acc. to OSHA and ANSI

Printing date 05/16/2006

Reviewed on 04/11/2006

1 Identification of substance:

Product details:

Product name: Aluminum slug

Stock number: 42328

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#) Aluminum (CAS# 7429-90-5): 100% Identification number(s): EINECS Number: 231-072-3

3 Hazards identification

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Hazard description: Not applicable
Information pertaining to particular dangers for man and environment
Not applicable
Classification system
HMIS ratings (scale 0-4)
(Hazardous Materials Identification System)
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HEALTH 0 FIRE 0 REACTIVITY 0

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Health (acute effects) = 0
Flammability = 0
Reactivity = 0
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4 First aid measures

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General information No special measures required.
After inhalation Seek medical treatment in case of complaints.
After skin contact Generally the product does not irritate the skin.
After eye contact
Rinse opened eye for several minutes under running water. If symptoms
persist, consult a doctor.
After swallowing Seek medical treatment.
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5 Fire fighting measures

Suitable extinguishing agents Special powder for metal fires. Do not use water. For safety reasons unsuitable extinguishing agents Water

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(Contd. of page 1) Special hazards caused by the material, its products of combustion or resulting gases: In case of fire, the following can be released: Metal oxide fume 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. Measures for environmental protection: Do not allow material to be released to the environment without proper governmental permits. Measures for cleaning/collecting: Pick up mechanically. Additional information: No dangerous substances are released. See Section 8 for information on personal protection equipment.

7 Handling and storage

Handling

Information for safe handling: No special precautions are necessary if used correctly. Information about protection against explosions and fires: No special measures required.

Storage
Requirements to be met by storerooms and receptacles:
No special requirements.
Information about storage in one common storage facility:
Do not store together with acids.
Store away from strong bases.
Further information about storage conditions:
Store in cool, dry conditions in well sealed containers.

8 Exposure controls and personal protection

Additional information about design of technical systems: No further data; see item 7.

Components with limit values that require monitoring at the workplace: Additional information: $NO \ data$

Personal protective equipment General protective and hygienic measures The usual precautionary measures for handling chemicals should be followed. Breathing equipment: Not required. Protection of hands: Not required. Eye protection: Safety glasses Body protection: Protective work clothing.

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General Information	
Form: Color: Odor:	Slug Silver-colored Odorless
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:	2450°C (4442°F)
Flash point:	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 at 20°C (68°F):	2.70 g/cm³
Solubility in / Miscibility with Water:	Insoluble

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: Bases Acids Dangerous reactions No dangerous reactions known Dangerous products of decomposition: Metal oxide fume

11 Toxicological information

Acute toxicity: Primary irritant effect: on the skin: Powder: irritant effect on the eye: Powder: irritant effect Sensitization: No sensitizing effects known. Other information (about experimental toxicology): Reproductive effects have been observed on tests with laboratory animals. Subacute to chronic toxicity: Aluminum may be implicated in Alzheimers disease. Inhalation of aluminum containing dusts may cause pulmonary disease. Subacute to chronic toxicity: The Registry of Toxic Effects of Chemical Substances (RTECS) reports the following effects in laboratory animals: Blood - changes in serum composition (e.g. TP, bilirubin, cholesterol). Endocrine - hypoglycemia. Lungs, Thorax, or Respiration - fibrosis (interstitial)

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(Contd. of page 3) Lung, Thorax, or Respiration - cough. Lungs, Thorax, or Respiration - dyspnea. Nutritional and Gross Metabolic - weight loss or decreased weight gain. Reproductive - Effects on Newborn - behavioral. Reproductive - Effects on Newborn - physical. Reproductive - Effects on Newborn - other postnatal measures or effects. Additional toxicological information: 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:

General notes:

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.

14 Transport information

Not a hazardous material for transportation.

DOT regulations:

Hazard class: None

Land transport ADR/RID (cross-border)

ADR/RID class:

Maritime transport IMDG: IMDG Class: None

Air transport ICAO-TI and IATA-DGR: ICAO/IATA Class: None

Transport/Additional information:

Not dangerous according to the above specifications.

15 Regulations

Product related hazard informations: Observe the general safety regulations when handling chemicals

National regulations

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

All components of this product are listed on the Canadian Domestic Substances List (DSL).

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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:** Darrell R. Sanders