E-mail: gcat@matthey.com

www.alfa-chemcat.com

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

Printing date 13.07.2010 Revision: 13.07.2010

1 Identification of substance

Product details

Trade name Aluminum lactate

Stock number:

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG Benzstrasse 3

D-76185 Karlsruhe / Germany

Informing department: Emergency information:

Product safety department. 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

Prevention:

Response:

H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
P261 Avoid breathing dust/furme/gas/mist/vapours/spray.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 Specific treatment (see on this label).
P405 Store locked up

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#)

Aluminum lactate (CAS# 18917-91-4), 95% Water (CAS# 7732-18-5), 5%

Identification number(s): EINECS Number:

242-670-9

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:

Protective equipment:

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 (CO) Wear self-contained breathing apparatus.

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.

Collect mechanically.
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

Handling Information 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 special measures required.

Storage Requirements to be met by storerooms and containers:

Information about storage in one common storage facility:
Further information about storage

conditions:

No special requirements.

Store away from oxidizing agents.

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 critical values that require

monitoring at the workplace:

Aluminum, soluble salts (as Al)

Aluminum, soluble saits (as AI)

mg/m3

ACGIH TLV

5 (welding fumes); 5 (pyro powders)

10 (metal dust)

Austria MAK

6 (dust)

Belgium TWA

10; 2 (salts), 5 (fumes), 5 (resp. dust)

10 (dust or fume)

Finland TWA

2 (salts)

10; 6 (fumes) 5 (resp. dust)

France VME 10; 5 (fúmes), 5 (resp. dust)

(Contd. on page 2)

(Contd. on page 3)

Printing date 13.07.2010 Revision: 13.07.2010 Trade name Aluminum lactate (Contd. of page 1) Germany MAK Hungary TWA Korea TLV A 2; 5-STEL, 4-STEL (salts)
5 (welding fumes); 5 (pyro powders)
10 (metal dust) Norway TWA 2-STEL Russiá Russia 2-STEL
Sweden NGV 4 (resp. dust); 10 (total dust)
Switzerland MAK-W 6
United Kingdom TWA 4 (resp. dust)
USA PEL 15 (total dust); 5 (resp. fraction) Additional information: 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. Safety glasses
Face protection
Protective work clothing. Breathing equipment: Eye protection: **Body protection:** 9 Physical and chemical properties: **General Information** Form: Powder Colour: Smell: White Odourless Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Decomposes before melting. Decomposes Not determined Flash point: Not applicable Ignition temperature: Not determined **Decomposition temperature:** Not determined Danger of explosion: Product is not explosive Critical values for explosion: Lower Not determined Upper: Not determined Not determined Steam pressure: Density Not determined Solubility in / Miscibility with Water: Soluble 10 Stability and reactivity Thermal decomposition / conditions to be No decomposition if used and stored according to specifications. Oxidizing agents
No dangerous reactions known avoided: Materials to be avoided: Dangerous reactions: Dangerous products of decomposition: Carbon monoxide and carbon dioxide 11 Toxicological information Acute toxicity: Primary irritant effect: on the skin: Irritant for skin and mucous membranes. on the eye: Sensitization: Irritant effect No sensitizing effect known. Other information (about experimental toxicology):
Additional toxicological information: Reproductive effects have been observed on tests with laboratory animals. 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 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: Consult state, local or national regulations for proper disposal. Recommendation Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations. Uncleaned packagings: Disposal must be made according to official regulations. Water, if necessary with cleaning agent. Recommendation: Recommended cleaning agent: 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:

None Marine pollutant:

Air transport ICAO-TI and IATA-DGR: ICAO/IATA Class:

None

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Trade name Aluminum lactate

Transport/Additional information: Not dangerous according to the above specifications (Contd. of page 2)

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.

Safety phrases:

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. 37 Wear suitable gloves.

National regulations

Information about limitation of use:

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

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:
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)
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 CAO: International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemical's Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)

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