

Material Safety Data Sheet

Material Safety Data Sheet according to Reg. (EU) 1907/2006-No 2015/830

Revision date: 13-06-2019

A1 ATP Powder

Section 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier: A1 ATP Powder

1.2. Relevant identified uses of the substance or mixture and uses advised against: Identified uses: thickener for the A1 L/P system

1.3. Details of the supplier of the safety data sheet

Supplier: A.C.T Nijverheidsweg 15 A 3251 LP Stellendam The Netherlands ++31-187-663006 info@activecomposite.com

1.4. Emergency telephone number

Emergency telephone: +31 (0) 187 663006

Section 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments Not classified.

2.2. Label elements: In compliance with EC regulation No 1272/2008 and its amendments: No labelling requirements.

2.3. Other hazards:

PBT assessment - The product is not considered to be a PBT. vPvB assessment - The product is not considered to be a vPvB

3.1. Substances

| Component | CAS | EC | Reach |
|---------------------|------------|-----------|--------------------|
| Aluminium hydroxide | 21645-51-2 | 244-492-7 | 01-211959292246-39 |

3.2. Mixtures: not relevant

Section 4. FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor. Remove contaminated clothing and shoes and launder thoroughly before reusing. If the patient is likely to become unconscious, place and transport in stable sideways position. Never induce swallowing by an unconscious person.

4.1. Description of first aid measures

Inhalation: Take the person out into the open air/ ensure supply of fresh air. If troubles remain, seek medical advice.

Skin contact: Wash the affected area carefully with soap and clean water

Eye contact: remove contact lenses. Wash eyes thoroughly with fresh, clean water for 15 minutes holding the eyelids open. If there is any redness, pain or visual impairment, consult and ophthalmologist.

Swallowing: Rinse mouth thoroughly with water, never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed: No data available

4.3. Indication of any immediate medical attention and special treatment needed: No data available.

Section 5. FIRE-FIGHTING MEASURES

Non-flammable:

5.1. Extinguishing media

Suitable methods of extinction: Water spay jet, foam, extinguishing powder, Carbon dioxide

Unsuitable methods of extinction: No data available

5.2. Special hazards arising from the substance or mixture: None known

5.3. Advice for firefighters: Use protective equipment appropriate for surrounding materials, In the event of fire, wear self-contained breathing apparatus, product itself does not burn. Adapt extinguisher and fire-fighting measures to fire in the environment.

Section 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel

Avoid dust formation. Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation.

For first aid worker: No data available. First aid workers will be equipped with suitable personal protective equipment (See section 8)

6.2. Environmental precautions: Keep spills and cleaning runoff out of municipal, sewers and open bodies.

6.3. Methods and material for containment and cleaning up: Pick up mechanically. When picked up, treat material as prescribed under heading "Disposal considerations".

6.4. Reference to other sections: No data available

Section 7. HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling:

Avoid the formation and deposition of dust. Provide good ventilation at the work area (local exhaust ventilation, if necessary). If workplace exposure limits are exceeded, respiratory protection approved for this particular job must be worn.

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and after work. Do not inhale dust. Use barrier cream for the skin.

Fire prevention: No special measures necessary.

Recommended equipment and procedures: For personnel protection, see section 8. Avoid dust formation. Provide appropriate exhaust ventilation in places where dust is formed. In case of insufficient ventilation, wear suitable respiratory equipment.

7.2. Conditions for safe storage, including any incompatibilities: No data available.

Technical measures and storage conditions: Keep container tightly closed in a cool, well-ventilated place. Store in a dry place.

Requirements for storage: Store product in closed containers. Always keep in containers of same material as the original one.

Advice on storage assembly

Do not store together with: Acids

7.3 Specific end use(s): see 1.2.

Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits:

Aluminum hydrocxide - CAS: 21645-51-2 EC: 244-492.7

Dust List of appoved workplace exposure limits (WELs/EH40 Total inhalable dust TWA: 10 mg/m3

Respirable dust TWA: 4 mg/m3

DNEL, DMEL and PNEC values:

DNEL values worker:

Inhalative – Long term (chronic) – Systemic – 10.76 mg/m3 Inhalative – Long term (chronic) – Local – 10.76 mg/m3

DNEL values consumer:

Oral – Long term (chronic) – Systemic – 4.74 mg/kg/day

8.2. Exposure controls

| Engineering Controls | Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. |
|-----------------------------------|---|
| Personal Protective Equipment | |
| Eye Protection Hand Protection | Safety glasses with side shields. (EN166) In case of intensive contact, wear protective gloves (EN 374). Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves. |
| Respiratory Protection: | If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of dust formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified. |
| Hygiene Measures: Other: | Handle in accordance with good industrial hygiene and safety practice. Normal chemical work clothing, |
| Environmental Exposure: | No data available. |

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| Appoarance | Powder |
|---|---------------------------------------|
| Appearance | |
| Odour | Odourless |
| Odour Threshold | No information available |
| pH: | 8.4 - 10.2, (5% water suspension) |
| Boiling point | 2980 °C, Reference pressure 101.3 kPa |
| Melting Point | appr. 300 °C |
| Flash point | Not applicable |
| Oxidising properties | Not applicable |
| Evaporation Rate | Not applicable |
| Flammability | Not applicable |
| Lower flammability/expolosive limits | Not applicable |
| Upper flammability/expolosive limits | Not applicable |
| Vapour Pressure | Not applicable |
| Relative Density | Not applicable |
| Density | 2,4 g/cm3, 20°C |
| Water Solubility | No data available |
| Explosive properties | Not applicable |
| Decomposition Temperature | 392 °C |
| Partition coefficient: N-octanol/water: | No data available |
| Viscosity: | Not relevant |

9.2. Other information: No data available.

Section 10. STABILITY AND REACTIVITY

10.2. Chemical stability: Stable under normal conditions of storage and handling (section 7).

10.3. Possibility of hazardous reactions: Dangerous reactions are not to be expected when handling product according to its intended use.

10.4. Conditions to avoid: No data available

10.5. Incompatible materials: Acids

10.6. Hazardous decomposition products: No hazardous decomposition products known

Section 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects:

11.1.1. Substances

Acute toxicity: Data from the scientific literature on components are summarized below.

| Acute oral toxicity Acute dermal toxicity Acute inhalation toxicity Skin irritation Eye irritation | LD50 > 2000 mg/kg bodyweight, Species rat, Method OECD 423, Source ECHA No data available no data available Species rabbit, Method OECD 404, Source ECHA, Evaluation non-irritant Species rabbit, Method OECD 405, Source ECHA, Evaluation non-irritant |
|--|---|
| Respiratory or skin Sensitization | Species guinea pig, Method OECD 406, Source ECHA, Evaluation non-sensitizing |
| Germ cell mutagenicity | Species rat, Method OECD 414, Source ECHA, Evaluation/classification Based on available data, the classification criteria are not met. |
| Carcinogenicity | No data available |
| Specific target organ systemic Toxicity | No data available |
| Single Exposure | |
| Specific target organ systemic Toxicity | No data available |
| Repeated Exposure | / Developmental Toxicity Screening Test) |
| Aspiration hazard | Not relevant |
| Symptoms related to physical/chemical And toxicological characteristics | Eye contact may cause mechanical irritation through dust particles |
| Delayed and immediate effects | Inhalation of dust may irritate the respiratory tract. |

Section 12. ECOLOGICAL INFORMATION

12.1. Toxicity

| Acute toxicity to fish | LC50 > 100 mg/l, Duration of exposure 96 h, Species Salmo trutta |
|-----------------------------|---|
| Chronic toxicity to fish | No data available |
| Acute toxicity to Daphnia | EC50 > 100 mg/l, Duration of exposure 48 h, Species Daphnia magna |
| Chronic toxicity to Daphnia | No data available |
| Acute toxicity to algae | EC50 > 100 mg/l, Duration of exposure 72 h, Species Scenedesmus capricornutum |
| Chronic toxicity to algae | No data available. |
| Bacteria toxicity | No data available |

12.2. Persistence and degradability: No data available.

12.3. Bio accumulative potential: No data available.

12.4. Mobility in soil: No data available.

12.5. Results of PBT and vPvB assessment: PBT assessment: The product is not considered to be a PBT. vPvB assessment: The product is not considered to be a vPvB.

12.6. Other adverse effects: No data available.

12.7 Other information: Do not discharge product unmonitored into the environment.

Section 13. DISPOSAL CONSIDERATIONS

Product - Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging - Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

Section 14. TRANSPORT INFORMATION

Exempt from transport classification and labelling.

| UN-No | None. |
|------------------------------|--|
| Proper Shipping Name | Refer to Sections 1 and 3 for product name and chemical name(s) |
| IMO / IMDG | Not a dangerous substance. |
| ICAO / IATA | Not a dangerous substance. |
| RID/ADR | Not a dangerous substance. |
| D.O.T. Hazard Classification | Non-hazardous material. |
| General Information | The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation. |
| Other information | Environmental hazards: None known |
| | Special precautions for user: Refer to Sections 2, 7, 8, 9, 10 |

Section 15. REGULATORY INFORMATION

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation):

In accordance with the Reach regulation (EC) 1907/2006, the product does not contain any substances that are considered as subject to listing in annex XIV, inventory of substances requiring authorisation.

REACH candidate list of substances of very high concern (SVHC) for authorisation

In accordance with article 57 and article 59 of the Reach regulation (EC) 1907/2006, this substance is not considered as subject to listing in annex XIV, inventory of substances requiring authorisation ("Authorization list").

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES

The substance is not subject to the provisions of annex XVII (restriction entries) of the Reach regulation (EC) 1907/2006.

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This substance is not subject to Part I or 2 of Annex I

National regulations

National chemical inventories

USA (TSCA) listed DSL listed DSL/NDSL (Canada) ENCS (Japan) listed listed KE-00980 ECL (Korea) listed AICS (Australia) IECSC / NEPA (China) listed PICCS (Philippines) listed NZIoC (New Zealand) listed

MSDS A1 ATP Powder

15.2 Chemical safety assessment No data available.

Section 16. OTHER INFORMATION

Sources of key data used for data sheet:

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU.

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and eco toxic data, are indicated directly in the corresponding chapter.

Revision date: 13-06-2019 - Version 2.0

DISCLAIMER OF LIABILITY

The information in this (M)SDS was obtained from sources we believe are reliable. However, this information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and maybe beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This (M)SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this (M)SDS may not be acceptable.