

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

Printing date 27.11.2008

Revision: 27.11.2008

**1 Identification of the substance/preparation and of the company/undertaking**

- **Product details**
- **Trade name:** STANDART Aluminium powder (all types)  
STANDART Aluminium powder VP ... (all types)
- **MSDS number:** ALPUI
- **Application of the substance / the preparation**  
Construction chemicals  
Pigment  
Printing inks  
Paint
- **Manufacturer/Supplier:**  
ECKART GmbH  
Kaiserstr. 30  
D-90763 Fürth/Bay.
- **Further information obtainable from:**  
O-SE-RA  
Tel. +49 (0)9152 - 77 4492  
Angelika.HartlGunselmann@altana.com
- **Information in case of emergency:**  
GBK Gefahrgut Büro GmbH, Ingelheim, Germany:  
From Outside US: (001) 352-323-3500  
(First call in English / Response in your language is possible)  
Toll free (US&Canada): 1-800-5355053

**2 Hazards identification**

- **Hazard description:**  
F Highly flammable
- **Information concerning particular hazards for human and environment:**  
Please refer to our website for further important safety instructions for handling aluminium powder:  
[http://www.eckart.net/fileadmin/webdata/documents/Safety\\_Instructions\\_GDA.pdf](http://www.eckart.net/fileadmin/webdata/documents/Safety_Instructions_GDA.pdf)  
R 10 Flammable.  
R 15 Contact with water liberates extremely flammable gases.
- **Classification system:**  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

**3 Composition/information on ingredients**

- **Chemical characterization**
- **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

EINECS: 231-072-3	aluminium powder, stabilized (phlegmatisiert)	F; R 10-15	> 95%
-------------------	---	------------	-------

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

**4 First-aid measures**

- **General information:**  
Take affected persons out into the fresh air.  
Take affected persons out of danger area and lay down.

(Contd. on page 2)

# Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 27.11.2008

Revision: 27.11.2008

**Trade name: STANDART Aluminium powder (all types)**  
**STANDART Aluminium powder VP ... (all types)**

(Contd. of page 1)

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.

## 5 Fire-fighting measures

- **Suitable extinguishing agents:**  
Special powder for metal fires. Do not use water.  
Use fire extinguishing methods suitable to surrounding conditions.  
Dry sand
- **For safety reasons unsuitable extinguishing agents:**  
Water  
Carbon dioxide  
ABC powder  
Foam
- **Special hazards caused by the substance, its products of combustion or resulting gases:**  
Contact with water liberates extremely flammable gas (hydrogen).
- **Protective equipment:** No special measures required.

## 6 Accidental release measures

- **Person-related safety precautions:**  
Wear protective equipment. Keep unprotected persons away.  
Avoid formation of dust.  
Keep away from ignition sources.
- **Measures for environmental protection:** Do not allow product to reach sewage system or any water course.
- **Measures for cleaning/collecting:**  
Do not flush with water or aqueous cleansing agents  
Pick up mechanically.  
Do not use a vacuum cleaner.
- **Additional information:**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.

## 7 Handling and storage

- **Handling:**
- **Information for safe handling:**  
Prevent formation of dust.  
Keep away from heat and direct sunlight.  
Handle with care. Avoid jolting, friction and impact.  
Any unavoidable deposit of dust must be regularly removed.
- **Information about fire - and explosion protection:**  
Use intrinsically safe equipment/non-sparking tools.  
Protect against electrostatic charges.  
Earthing of containers and apparatuses is essential.  
Dust can combine with air to form an explosive mixture.  
Reaction with water liberates extremely flammable gas (hydrogen)  
Keep ignition sources away - Do not smoke.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Store in cool, dry place in tightly closed receptacles.

(Contd. on page 3)

# Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 27.11.2008

Revision: 27.11.2008

**Trade name: STANDART Aluminium powder (all types)**  
**STANDART Aluminium powder VP ... (all types)**

(Contd. of page 2)

- Store only in the original receptacle.  
 Use only receptacles specifically permitted for this substance/product.
- **Information about storage in one common storage facility:**  
 Store away from flammable substances.  
 Do not store together with oxidizing and acidic materials.  
 Do not store together with alkalis (caustic solutions).
  - **Further information about storage conditions:**  
 Protect from humidity and water.  
 Keep container tightly sealed.  
 Caution when reopening receptacles with broken seal.

## 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **Ingredients with limit values that require monitoring at the workplace:**

**aluminium powder, stabilized (phlegmatisiert)**

OES	Long-term value: 10* 4** mg/m <sup>3</sup> *total inhalable dust **respirable dust
-----	---

- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
 Wash hands before breaks and at the end of work.  
 Keep away from foodstuffs, beverages and feed.  
 Immediately remove all soiled and contaminated clothing  
 Do not eat, drink, smoke or sniff while working.
- **Respiratory protection:**  
 Use suitable breathing protection if workplace concentration requires.  
 Filter P1
- **Protection of hands:**  
 Leather gloves  
 Long cuffed gloves
- **Eye protection:** Face protection
- **Body protection:**  
 Anti-static and fire resistant protective clothing. EN 531; EN 533; EN 1149-1  
 Anti-static safety shoes.

## 9 Physical and chemical properties

- **General Information**

<b>Form:</b>	Powder
<b>Colour:</b>	Silver-coloured
<b>Odour:</b>	Odourless

- **Change in condition**

<b>Melting point/Melting range:</b>	660°C
<b>Boiling point/Boiling range:</b>	2467°C

- **Flash point:** Not applicable.

- **Flammability (solid, gaseous):** Flammable.  
 Contact with water liberates extremely flammable gases.

- **Ignition temperature:** > 400°C
- **Minimum ignition temperature test - dust layer** > 230°C

(Contd. on page 4)

# Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 27.11.2008

Revision: 27.11.2008

**Trade name: STANDART Aluminium powder (all types)**  
**STANDART Aluminium powder VP ... (all types)**

(Contd. of page 3)

· <b>Self-igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	The product is not hazardous in regard of explosions, however, may form explosive dust/air mixtures.
· <b>Explosion limits:</b>	
<b>Lower:</b>	30 g/m <sup>3</sup>
· <b>Density at 20°C:</b>	2.7 g/cm <sup>3</sup>
· <b>Solubility in / Miscibility with water:</b>	Insoluble.

## 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**  
 No decomposition if used according to specifications.  
 No decomposition if used and stored according to specifications.
- **Dangerous reactions**  
 Avoid dust clouds, they may form explosible dust-air-mixture.  
 Reacts with halogenated compounds  
 Reacts with halogenated compounds.  
 Reacts with acids, alkalis and oxidizing agents.  
 Reacts with alkalis, acids, halogenes and oxidizing agents.  
 Contact with water may release flammable gases.  
 Risk of dust explosion.
- **Dangerous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Subacute to chronic toxicity:** No effects known
- **Additional toxicological information:** Above given information is based on long term experience.

## 12 Ecological information

- **General notes:**  
 Do not allow product to reach ground water, water course or sewage system.  
 Generally not hazardous for water

## 13 Disposal considerations

- **Product:**
- **Recommendation**  
 Must not be disposed together with household garbage. Do not allow product to reach sewage system.  
 Can be disposed of with household garbage with prior chemical-physical or biological treatment following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

(Contd. on page 5)

# Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 27.11.2008

Revision: 27.11.2008

**Trade name:** STANDART Aluminium powder (all types)  
STANDART Aluminium powder VP ... (all types)

(Contd. of page 4)

· **European waste catalogue**

12 01 04	non-ferrous metal dust and particles
----------	--------------------------------------

· **Uncleaned packaging:**

· **Recommendation:**

Disposal must be made according to official regulations.

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

## 14 Transport information

· **Land transport ADR/RID (cross-border)**

· **ADR/RID class:** 4.1 Flammable solids, self-reactive substances and solid desensitised explosives.

· **Danger code (Kemler):** 40

· **UN-Number:** 1309

· **Packaging group:** II

· **Hazard label** 4.1

· **Description of goods:** 1309 ALUMINIUM-PULVER, ÜBERZOGEN  
1309 ALUMINIUM POWDER, COATED

· **Maritime transport IMDG:**

· **IMDG Class:** 4.1

· **UN Number:** 1309

· **Label** 4.1

· **Packaging group:** II

· **EMS Number:** F-G,S-G

· **Marine pollutant:** No

· **Proper shipping name:** ALUMINIUM POWDER, COATED

· **Air transport ICAO-TI and IATA-DGR:**

· **ICAO/IATA Class:** 4.1

· **UN/ID Number:** 1309

· **Label** 4.1

· **Packaging group:** II

· **Proper shipping name:** ALUMINIUM POWDER, COATED

## 15 Regulatory information

· **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· **Code letter and hazard designation of product:**



F Highly flammable

· **Risk phrases:**

10 Flammable.

15 Contact with water liberates extremely flammable gases.

· **Safety phrases:**

7/8 Keep container tightly closed and dry.

43 In case of fire, use dry sand. Never use water.

GB

(Contd. on page 6)

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

Printing date 27.11.2008

Revision: 27.11.2008

**Trade name: STANDART Aluminium powder (all types)**  
**STANDART Aluminium powder VP ... (all types)**

(Contd. of page 5)

### 16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

· **Relevant R-phrases**

10 Flammable.

15 Contact with water liberates extremely flammable gases.

· **Department issuing MSDS: O-SE-RA Regulatory Affairs**

· **Contact:**

Dr. Angelika Hartl-Gunselmann

Tel.: ++49 (0) 9152 77 4492

FAX: ++49 (0) 9152 77 4499

Angelika.HartlGunselmann@altana.com

GB