

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

**STANDART REFLEXAL 135 Aluminiumflake**

Version 2.1

Revision Date 30.12.2019

Print Date 22.02.2022

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Trade name : STANDART REFLEXAL 135 Aluminiumflake  
Material number : 040367E30

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

This information is not available.

**1.3 Details of the supplier of the safety data sheet**

Company : ECKART GmbH  
Guentersthal 4  
91235 Hartenstein  
Telephone : +499152770  
Telefax : +499152777008  
E-mail address : msds.eckart@altana.com  
Responsible/issuing person

**1.4 Emergency telephone number****NCEC:**

(contract no.: ECKART29003-NCEC)

+44 1235 239671 (Middle East/Africa, call and response in your language)

+1 215 207 0061 (Americas, call and response in your language)

+65 3158 1074 (Asia-Pacific, call and response in your language)

**SECTION 2: Hazards identification****GHS Classification**

Not a dangerous substance according to GHS.

**Information concerning particular** : Please refer to our website for further important

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**hazards for human and environment:** safety instructions for handling aluminium powder:  
[http://www.eckart.net/fileadmin/eckart/Service/GDA  
\\_Alupulver\\_Safety\\_engl.pdf](http://www.eckart.net/fileadmin/eckart/Service/GDA_Alupulver_Safety_engl.pdf)

**GHS-Labeling**

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS).

**Hazardous components which must be listed on the label****Other hazards which do not result in classification**

Combustible Solids

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**SECTION 3: Composition/information on ingredients**

Substance name : aluminium powder (stabilised)  
Substance No. : EINECS-No. : 231-072-3

No hazardous ingredients For the full text of the H-Statements mentioned in this Section, see Section 16.

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**SECTION 4: First aid measures****4.1 Description of first aid measures**

General advice : Move the victim to fresh air.  
No hazards which require special first aid measures.

If inhaled : If unconscious, place in recovery position and seek medical advice.  
If symptoms persist, call a physician.

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- In case of skin contact : Wash off immediately with soap and plenty of water.
- In case of eye contact : Remove contact lenses.  
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.

**4.2 Most important symptoms and effects, both acute and delayed**

This information is not available.

**4.3 Indication of any immediate medical attention and special treatment needed**

This information is not available.

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**SECTION 5: Firefighting measures****5.1 Extinguishing media**

- Suitable extinguishing media : Dry sand, Special powder against metal fire
- Unsuitable extinguishing media : ABC powder, Carbon dioxide (CO<sub>2</sub>), Water, Foam

**5.2 Special hazards arising from the substance or mixture**

- Specific hazards during firefighting : Contact with water liberates extremely flammable gas (hydrogen).

**5.3 Advice for firefighters**

- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.
- Further information : Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the

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surrounding environment.

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**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions : Use personal protective equipment.  
Evacuate personnel to safe areas.  
Avoid dust formation.

**6.2 Environmental precautions**

Environmental precautions : No special environmental precautions required.

**6.3 Methods and materials for containment and cleaning up**

Methods for cleaning up : Use mechanical handling equipment.  
Do not use a vacuum cleaner.

Pick up and arrange disposal without creating dust.  
Sweep up and shovel.  
Do not flush with water.  
Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**

For personal protection see section 8.

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**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

Advice on safe handling : Avoid creating dust. Routine housekeeping should be  
instituted to ensure that dusts do not accumulate on surfaces.  
Keep away from heat and sources of ignition. Do not smoke.

For personal protection see section 8. Smoking, eating and

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drinking should be prohibited in the application area.

Advice on protection against fire and explosion : During processing, dust may form explosive mixture in air. Take measures to prevent the build up of electrostatic charge. Earthing of containers and apparatuses is essential. Use explosion-proof equipment. When transferring from one container to another apply earthing measures and use conductive hose material.

Normal measures for preventive fire protection.

Hygiene measures : General industrial hygiene practice.

**7.2 Conditions for safe storage, including any incompatibilities**

Requirements for storage areas and containers : Reaction with water liberates extremely flammable gas (hydrogen) Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Keep container closed when not in use. Keep away from sources of ignition - No smoking.

Electrical installations / working materials must comply with the technological safety standards.

Further information on storage conditions : Protect from humidity and water.

Advice on common storage : Do not store together with oxidizing and self-igniting products. Never allow product to get in contact with water during storage. Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

Other data : Keep in a dry place. No decomposition if stored and applied as directed.

**7.3 Specific end use(s)**

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This information is not available.

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Germany:**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
aluminium powder (stabilised)	7429-90-5	AGW (Inhalable fraction)	10 mg/m <sup>3</sup>	2014-04-02	DE TRGS 900
Peak-limit: excursion factor (category)	2;(II)				
Further information	Commission for dangerous substancesSenate commission for the review of compounds at the work place dangerous for the health (MAK-commission).				
aluminium powder (stabilised)	7429-90-5	AGW (Alveolate fraction)	1,25 mg/m <sup>3</sup>	2014-04-02	DE TRGS 900
Peak-limit: excursion factor (category)	2;(II)				
Further information	Commission for dangerous substancesSenate commission for the review of compounds at the work place dangerous for the health (MAK-commission).				

**United States of America (USA):**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
aluminium powder (stabilised)	7429-90-5	TWA (total dust)	50 Million particles per cubic foot	2012-07-01	
aluminium powder	7429-90-5	TWA (Respirable)	5 mg/m <sup>3</sup>	2013-10-08	

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(stabilised)					
aluminium powder (stabilised)	7429-90-5	TWA (total dust)	15 mg/m3	2012-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (total)	10 mg/m3	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (respirable fraction)	5 mg/m3	2012-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (respirable fraction)	15 Million particles per cubic foot	2012-07-01	
aluminium powder (stabilised)	7429-90-5	PEL (Total dust)	10 mg/m3	2014-11-26	
aluminium powder (stabilised)	7429-90-5	PEL (respirable dust fraction)	5 mg/m3	2014-11-26	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable fraction)	1 mg/m3	2008-01-01	
aluminium powder (stabilised)	7429-90-5	TWA	5 mg/m3	2005-09-01	
aluminium powder (stabilised)	7429-90-5	TWA (Total)	15 mg/m3	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable fraction)	5 mg/m3	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (total dust)	15 mg/m3	2011-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (respirable fraction)	5 mg/m3	2011-07-01	
aluminium	7429-90-5	TWA (Total)	15 mg/m3	1989-01-19	

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powder (stabilised)		dust)			
aluminium powder (stabilised)	7429-90-5	TWA (respirable dust fraction)	5 mg/m3	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (welding fumes)	5 mg/m3	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (pyro powders)	5 mg/m3	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable fraction)	1 mg/m3	2013-03-01	
aluminium powder (stabilised)	7429-90-5	TWA (Fumes)	5 mg/m3	1989-01-19	
aluminium powder (stabilised)	7429-90-5	PEL (Welding fumes)	5 mg/m3	2017-10-02	
aluminium powder (stabilised)	7429-90-5	PEL (Pyro powders)	5 mg/m3	2017-10-02	

## 8.2 Exposure controls

### Personal protective equipment

Eye protection : Face-shield  
: Safety glasses

Hand protection  
Material : Leather

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- Glove length : Long sleeve gloves
- Remarks : Leather gloves  
The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other.
- Skin and body protection : Anti-static and fire resistant protective clothing. DIN EN 11612; EN 533; EN 1149-1. Anti-static safety shoes.
- Respiratory protection : Use suitable breathing protection if workplace concentration requires.  
Breathing apparatus with filter.  
P1 filter

**Environmental exposure controls**

- General advice :  
: No special environmental precautions required.
- Water : The product should not be allowed to enter drains, water courses or the soil.  
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**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties**

- Appearance : powder
- Colour : silver

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Odour	: odourless
pH	: No data available
Melting point/range	: 660 °C
Boiling point/boiling range	: 2 467 °C
Flash point	: No data available
Bulk density	: No data available
Flammability (solid, gas)	: Combustible Solids
Auto-flammability	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: 30 g/m <sup>3</sup>
Vapour pressure	: No data available
Density	: No data available
Water solubility	: No data available
Miscibility with water	: immiscible
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Flow time	: No data available

**9.2 Other information**

No data available

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**SECTION 10: Stability and reactivity****10.1 Reactivity**

No decomposition if stored and applied as directed.

**10.2 Chemical stability**

No decomposition if stored and applied as directed.

**10.3 Possibility of hazardous reactions**

Hazardous reactions : Contact with acids and alkalis may release hydrogen.

Stable under recommended storage conditions.

Dust may form explosive mixture in air.

**10.4 Conditions to avoid**

Conditions to avoid : No data available

**10.5 Incompatible materials**

Materials to avoid : Acids  
Bases  
Oxidizing agents  
Water

**10.6 Hazardous decomposition products**

Hazardous decomposition products : No data available

Other information : No data available

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**SECTION 11: Toxicological information****11.1 Information on toxicological effects**

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**Acute toxicity**

No data available

**Skin corrosion/irritation**

No data available

**Serious eye damage/eye irritation**

No data available

**Respiratory or skin sensitisation**

No data available

**Carcinogenicity**

No data available

**Toxicity to reproduction/fertility**

No data available

**Reprod.Tox./Development/Teratogenicity**

No data available

**STOT - single exposure**

No data available

**STOT - repeated exposure**

No data available

**Aspiration toxicity**

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No data available

**Further information****Product**

No data available

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**SECTION 12: Ecological information****12.1 Toxicity**

No data available

**12.2 Persistence and degradability**

No data available

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

No data available

**12.6 Other adverse effects****Product:**

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Additional ecological  
information : No data available

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**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

Product : In accordance with local and national regulations.

Contaminated packaging : Empty containers should be taken to an approved waste  
handling site for recycling or disposal.  
In accordance with local and national regulations.

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**SECTION 14: Transport information****14.1 UN number****14.2 Proper shipping name****14.3 Transport hazard class****14.4 Packing group****14.5 Environmental hazards****14.6 Special precautions for user**

Not classified as dangerous in the meaning of transport regulations.

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

No data available

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**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

**15.2 Chemical safety assessment**

No data available

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**SECTION 16: Other information**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

# SAFETY DATA SHEET



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