STANDART PCU 1500 Aluminium Powder

Version 1.1 Revision Date 07.02.2014 Print Date 19.11.2018

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : STANDART PCU 1500 Aluminium Powder

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

GBK Gefahrgut Büro GmbH, Ingelheim, Germany:
From outside US: : (001) 352-323-3500
(First call in English, response in your language is possible)
US & Canada (toll free) : 1-800-5355-053

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable solids , Category 1 H228: Flammable solid.

Classification (67/548/EEC, 1999/45/EC)

Highly flammable R11: 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/eckart/Service/GDA_Alupulver_Safety_engl.pdf

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms	:		
Signal word	:	Danger	
Hazard statements	:	H228	Flammable solid.
Precautionary statements	:	**Prevention:**	
		P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
		P240	Ground/bond container and receiving equipment.
		P241	Use explosion-proof electrical/ ventilating/ lighting/ equipment.
		P280	Wear protective gloves/ eye protection/ face protection.
		Response:	
		P370 + P378	In case of fire: Use for extinction: Special powder for metal fires.
		P370 + P378	In case of fire: Use for extinction: Dry sand.

2.3 Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
aluminium	7429-90-5 231-072-3 01-2119529243-45	F; R11	Flam. Sol. 1; H228	>= 50 - <= 100
3-trimethoxysilylpropyl methacrylate	2530-85-0 219-785-8 01-2119513216-50			>= 3 - < 5

For the full text of the R-phrases mentioned in this Section, see Section 16.
For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	:	Move out of dangerous area. Move the victim to fresh air.
If inhaled	:	If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	:	If on skin, rinse well with water. If on clothes, remove clothes. Wash off immediately with soap and plenty of water.
In case of eye contact	:	Flush eyes with water as a precaution. Remove contact lenses. Keep eye wide open while rinsing. 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

Symptoms	:	No information available.
Risks	:	No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment	:	No information available.

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 (CO2), 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 fire fighting if necessary.
Further information	:	Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	:	Avoid dust formation. Remove all sources of ignition. Use personal protective equipment. Evacuate personnel to safe areas.

6.2 Environmental precautions

Environmental precautions	:	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up	:	Do not flush with water. Keep in suitable, closed containers for disposal. Use mechanical handling equipment. Do not use a vacuum cleaner.

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	:	For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations. Avoid creating dust. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Store away from heat.
Advice on protection against fire and explosion	:	Keep away from open flames, hot surfaces and sources of ignition. Use explosion-proof equipment. During processing, dust may form explosive mixture in air. Take measures to prevent the build up of electrostatic charge. When transferring from one container to another apply earthing measures and use conductive hose material.
Hygiene measures	:	Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	:	No smoking. Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards. Earthing of containers and apparatuses is essential. Reaction with water liberates extremely flammable gas (hydrogen) Use explosion-proof equipment. Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Keep away from sources of ignition - No smoking. Keep container closed when not in use.
Further information on storage conditions	:	Protect from humidity and water.
Advice on common storage	:	Do not store near acids. Do not store together with oxidizing and self-igniting products. Never allow product to get in contact with water during storage. Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.
German storage class	:	4.1B, Flammable solid hazardous materials
Other data	:	Keep in a dry place. No decomposition if stored and applied as directed.

7.3 Specific end use(s)

This information is not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
aluminium	7429-90-5	TWA (Inhalable)	10 mg/m3	2011-12-01	GB EH40
Further information		The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit.Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used			
aluminium	7429-90-5	TWA (Respirable)	4 mg/m3	2011-12-01	GB EH40
Further information		The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit.Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used			
aluminium	7429-90-5	TWA (Inhalable)	10 mg/m3	2005-04-06	GB EH40
Further information		For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dustThe COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts			

		have been assigned specific WELs and exposure to these must comply with the appropriate limit.Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'.Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3.Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with.Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used			
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Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis

silicon dioxide	7631-86-9	TWA (Inhalable)	6 mg/m3	2007-08-01	GB EH40
Further information		For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dustThe COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit.Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'.Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3.Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with.Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used			
silicon dioxide	7631-86-9	TWA (Respirable)	2.4 mg/m3	2007-08-01	GB EH40
Further information		For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dustThe COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit.Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'.Inhalable			

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8.2 Exposure controls

Personal protective equipment

Eye protection	:	Eye wash bottle with pure water
	:	Face-shield
Hand protection		
Material	:	Leather
Glove length	:	Long sleeve gloves
Remarks	:	The suitability for a specific workplace should be discussed with the producers of the protective gloves.
	:	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	:	Dust impervious protective suit Choose body protection according to the amount and concentration of the dangerous substance at the work place.
	:	Anti-static and fire resistant protective clothing. EN 531; 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	:	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
	:	
Water	:	
	:	The product should not be allowed to enter drains, water courses or the soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	powder
Colour	:	silver
Odour	:	odourless
pH	:	no data available
Melting point/freezing point	:	660 °C
Boiling point/boiling range	:	2,467 °C
Flash point	:	no data available
Bulk density	:	no data available
Flammability (solid, gas)	:	no data available
Smoldering temperature	:	> 230 °C
Auto-flammability	:	no data available
Upper explosion limit	:	no data available
Lower explosion limit	:	30 mg/m3
Vapour pressure	:	no data available
Density	:	no data available
Water solubility	:	no data available

Solubility in other solvents	:	no data available
Partition coefficient: n-octanol/water	:	no data available
Auto-ignition temperature	:	340 °C
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

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 : Stable under recommended storage conditions.

Contact with acids and alkalis may release hydrogen.

Dust may form explosive mixture in air.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Acids
Bases
Oxidizing agents

10.6 Hazardous decomposition products

Other information : no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Components:

7429-90-5 :

Acute inhalation toxicity	:	LC50 rat: > 5 mg/l
		Exposure time: 4 h
		Test atmosphere: dust/mist

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

no data available

Further information

Product

no data available

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:

Additional ecological information	:	no data available

SECTION 13: Disposal considerations

European Waste Catalogue : 12 01 04 - non-ferrous metal dust and particles

13.1 Waste treatment methods

Product : Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: Transport information

14.1 UN number

ADR : 1309

IMDG : 1309

IATA : 1309

14.2 Proper shipping name

ADR : ALUMINIUM POWDER, COATED

IMDG : ALUMINIUM POWDER, COATED

IATA : ALUMINIUM POWDER, COATED

14.3 Transport hazard class

ADR : 4.1

IMDG : 4.1

IATA : 4.1

14.4 Packing group

ADR

Packaging group : II

Classification Code : F3

Hazard identification No : 40

Labels	:	4.1
Tunnel restriction code	:	(E)

IMDG

Packaging group	:	II
Labels	:	4.1
EmS Number	:	F-G, S-G

IATA

Packing instruction (cargo aircraft)	:	448
Packing instruction (passenger aircraft)	:	445
Packing instruction (LQ)	:	Y441
Packaging group	:	II
Labels	:	4.1

14.5 Environmental hazards

14.6 Special precautions for user

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

no data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

15.2 Chemical Safety Assessment

no data available

SECTION 16: Other information

Full text of R-Phrases

R11 Highly flammable.

Full text of H-Statements

H228	Flammable solid.

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.