STANDART PCBF 3500

Version 2.1 Revision Date 22.11.2023 Print Date 30.11.2024

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

1.1 Product identifier

Trade name : STANDART PCBF 3500
Material number : 022057E30

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 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

GHS-Labelling

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

SECTION 3: Composition/information on ingredients

Substance No. :

Hazardous components

Chemical name	CAS-No. EINECS-No.	Classification and labelling	Concentration[%]
aluminium	7429-90-5 231-072-3	Flam. Sol.;1;H228	25 - 50

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 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.

In case of skin contact : Wash off immediately with soap and plenty of water.

In case of eye contact	:	Remove contact lenses.
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.

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

6.2 Environmental precautions

General advice : The product should not be allowed to enter drains, water courses or the soil.
If the product contaminates rivers and lakes or drains inform respective authorities.

This information is not available.

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.

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 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)

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	7429-90-5	AGW (Inhalable fraction)	10 mg/m3	2021-07-02	DE TRGS 900
Peak-limit: excursion factor (category)		2;(II)			
Further information		When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
aluminium	7429-90-5	AGW (Alveolate fraction)	1,25 mg/m3	2021-07-02	DE TRGS 900
Peak-limit: excursion factor (category)		2;(II)			
Further information		When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
silicon dioxide	7631-86-9	AGW (Inhalable fraction)	4 mg/m3	2013-09-19	DE TRGS 900
Further information		Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).Colloidal amorphous silica, including pyrogenic silica and in wet processes manufactured silica (precipitated silica, silicagel).When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			

United States of America (USA):

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
aluminium	7429-90-5	TWA (total dust)	50 Million particles per cubic foot	2012-07-01	
aluminium	7429-90-5	TWA	5 mg/m3	2013-10-08	

		(Respirable)			
aluminium	7429-90-5	TWA (total dust)	15 mg/m3	2012-07-01	
aluminium	7429-90-5	TWA (total)	10 mg/m3	2013-10-08	
aluminium	7429-90-5	TWA (respirable fraction)	5 mg/m3	2012-07-01	
aluminium	7429-90-5	TWA (respirable fraction)	15 Million particles per cubic foot	2012-07-01	
aluminium	7429-90-5	PEL (Total dust)	10 mg/m3	2014-11-26	
aluminium	7429-90-5	PEL (respirable dust fraction)	5 mg/m3	2014-11-26	
aluminium	7429-90-5	TWA (Respirable particulate matter)	1 mg/m3	2008-01-01	
aluminium	7429-90-5	TWA	5 mg/m3	2005-09-01	
aluminium	7429-90-5	TWA (Total)	15 mg/m3	1989-01-19	
aluminium	7429-90-5	TWA (Respirable fraction)	5 mg/m3	1989-01-19	
aluminium	7429-90-5	TWA (total dust)	15 mg/m3	2011-07-01	
aluminium	7429-90-5	TWA (respirable fraction)	5 mg/m3	2011-07-01	
aluminium	7429-90-5	TWA (Total dust)	15 mg/m3	1989-01-19	
aluminium	7429-90-5	TWA (respirable dust fraction)	5 mg/m3	1989-01-19	
aluminium	7429-90-5	TWA (welding fumes)	5 mg/m3	2013-10-08	
aluminium	7429-90-5	TWA (pyro powders)	5 mg/m3	2013-10-08	
aluminium	7429-90-5	TWA (Respirable particulate matter)	1 mg/m3	2013-03-01	
aluminium	7429-90-5	TWA (Fumes)	5 mg/m3	1989-01-19	
aluminium	7429-90-5	PEL (Welding fumes)	5 mg/m3	2017-10-02	
aluminium	7429-90-5	PEL (Pyro powders)	5 mg/m3	2017-10-02	
aluminium	7429-90-5	TWA (powder)	5 mg/m3	1989-01-19	
silicon	7631-86-9	TWA (Dust)	20 Million particles	2012-07-01	

dioxide			per cubic foot		
silicon dioxide	7631-86-9	TWA (Dust)	80 mg/m3 / %SiO2	2012-07-01	
silicon dioxide	7631-86-9	TWA	6 mg/m3	2013-10-08	
silicon dioxide	7631-86-9	PEL	6 mg/m3	2014-11-26	

8.2 Exposure controls

Personal protective equipment

Eye protection : Face-shield

: Safety glasses

Hand protection

Material : Leather

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 : The product should not be allowed to enter drains, water courses or the soil.

: If the product contaminates rivers and lakes or drains inform respective authorities.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	powder
Colour	:	silver
Odour	:	characteristic
pH	:	substance/mixture is non-soluble (in water)
Melting point/range	:	> 600 °C
Boiling point/boiling range	:	No data available
Flash point	:	No data available
Bulk density	:	ca. 0,34 g/cm3
Flammability (solid, gas)	:	Combustible Solids
Auto-flammability	:	No data available
Upper explosion limit	:	No data available
Lower explosion limit	:	30 g/m3
Vapour pressure	:	No data available
Density	:	ca. 1,7 g/cm3
Solubility(ies)		
Water solubility	:	insoluble
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

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

Other information : No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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

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

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.

SECTION 14: Transport information

14.1 UN number

ADR

Not dangerous goods

TDG

Not dangerous goods

CFR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.2 Proper shipping name

ADR

Not dangerous goods

TDG

Not dangerous goods

CFR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.3 Transport hazard class

ADR

Not dangerous goods

TDG

Not dangerous goods

CFR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.4 Packing group

ADR

Not dangerous goods

TDG

Not dangerous goods

CFR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

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

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 (EU) 2019/1021 on persistent organic pollutants (recast)	:	Not applicable
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	:	Banned and/or restricted (aluminium powder (stabilised))

15.2 Chemical safety assessment

No data available

SECTION 16: Other information

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.