according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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

1.1 Product identifier

Trade name : STANDART PC 100 Aluminium Powder

Product code : 049115E30

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

Use of the : Colouring agents, pigments

Substance/Mixture

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 of person responsible for the SDS

: msds.eckart@altana.com

1.4 Emergency telephone number

NCEC: +44 1235 239670 (Europe)

Call and response in your language is possible.

Contract no.: ECKART29003-NCEC.

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.

Information concerning particular hazards for human and environment:

Please refer to our website for further important safety instructions for handling aluminium

http://www.eckart.net/fileadmin/eckart/Service/GDA_Alupulver_Safety_engl.pdf

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Hazard pictograms :

Signal word : Danger

Hazard statements : H228 Flammable solid.

Precautionary statements : Prevention:

P210 Keep away from heat, hot surfaces, sparks,

open flames and other ignition sources. No

smoking.

P240 Ground and bond container and receiving

equipment.

P241 Use explosion-proof electrical/ ventilating/

lighting equipment.

P280 Wear protective gloves/ protective clothing/

eye protection/ face protection/ hearing

protection.

Response:

P370 + P378 In case of fire: Use dry sand, dry chemical

or alcohol-resistant foam to extinguish.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Components			
Chemical name	CAS-No.	ClassificationREGUL	Concentration
	EC-No.	ATION (EC) No	(% w/w)
	Index-No.	1272/2008	
	Registration number		
aluminium powder (stabilised)	7429-90-5 231-072-3 013-002-00-1	Flam. Sol. 1; H228	>= 50 - <= 100
	01-2119529243-45		

For explanation of abbreviations see section 16.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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SECTION 4: First aid measures

4.1 Description of first aid measures

General advice Move the victim to fresh air.

Move out of dangerous area.

Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

If inhaled Remove to fresh air.

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.

If on clothes, remove clothes.

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

None known.

4.3 Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Dry sand

Special powder against metal fire

Unsuitable extinguishing

ABC powder media

Carbon dioxide (CO2)

Water Foam

5.2 Special hazards arising from the substance or mixture

Specific hazards during

Contact with water liberates extremely flammable gas

firefighting

(hydrogen).

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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5.3 Advice for firefighters

Special protective equipment:

for firefighters

Wear self-contained breathing apparatus for firefighting if

necessary.

Further information : For safety reasons in case of fire, cans should be stored

separately in closed containments.

Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment. Use a water spray to cool fully closed containers.

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.

Remove all sources of ignition.

6.2 Environmental precautions

General advice : The product should not be allowed to enter drains, water

courses or the soil.

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 material for containment and cleaning up

Methods for cleaning up : Use mechanical handling equipment.

Do not use a vacuum cleaner.

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

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.

Store away from heat.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the

application area.

Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national

regulations.

Advice on protection against

fire and explosion

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.

Provide appropriate exhaust ventilation at places where dust is formed. Keep away from open flames, hot surfaces and

sources of ignition.

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

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.

No smoking. Keep container tightly closed in a dry and wellventilated place. 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

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

Further information on

storage stability

Keep in a dry place.

No decomposition if stored and applied as directed.

7.3 Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Basis
Dasis



according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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aluminium powder (stabilised)	7429-90-5	TWA (Inhalable)	10 mg/m3	GB EH40
		TWA (Respirable fraction)	4 mg/m3	GB EH40
		TWA (inhalable dust)	10 mg/m3	GB EH40
	inhalable dust when samplin MDHS14/4 Grespirable, the substance has concentration inhalable dust any dust will be levels. Some must comply particles of a particular part response that distinguishes and 'respirable material that eavailable for othe fraction definitions and contain compshould be contained.	t are those fractions ig is undertaken in an eneral methods for so pracic and inhalable zardous to health incident in air equal to or great or 4 mg.m-3 8-hour or 5 mg.m-3 8-hour or 5 mg.m-3 8-hour or 5 mg.m-3 8-hour or 6 m	ses of these limits, respirable of airborne dust which will be ecordance with the methods ampling and gravimetric analerosols., The COSHH definitudes dust of any kind when eater than 10 mg.m-3 8-hour TWA of respirable dust. This if people are exposed to dustigned specific WELs and exhimits., Most industrial dusts. The behaviour, deposition at the nature and size of the partimit-setting purposes termes the nature. Respirable dusting and piratory tract. Respirable dusting gas exchange region of the all are given in MDHS14/4., Vair own assigned WEL, all the prospection of the specific short-term expose exposure limit should be use	e collected described in alysis or altion of a present at a TWA of a means that ast above these posure to these contain and fate of any and the body article. HSE ariborne ariborne ariborne ariborne approximates e lung. Fuller Where dusts a relevant limits are limit is listed,
	a figure times	TWA (Respirable dust)	4 mg/m3	GB EH40
	inhalable dust when samplin MDHS14/4 Grespirable, the substance has concentration inhalable dust any dust will be levels. Some must comply particles of a particular part response that distinguishes and 'respirable material that e available for continuation of the substance of t	t are those fractions ig is undertaken in an eneral methods for so pracic and inhalable zardous to health incominair equal to or great or 4 mg.m-3 8-hour or subject to COSHI dusts have been asswith the appropriate wide range of sizes. It elicits, depend on two size fractions for et., Inhalable dust apenters the nose and deposition in the response in the size and deposition in	ses of these limits, respirable of airborne dust which will be coordance with the methods ampling and gravimetric ana aerosols., The COSHH definctudes dust of any kind when eater than 10 mg.m-3 8-hour TWA of respirable dust. This if people are exposed to dustigned specific WELs and explimits., Most industrial dusts The behaviour, deposition at the human respiratory system the nature and size of the partimit-setting purposes termed proximates to the fraction of mouth during breathing and piratory tract. Respirable dusing gas exchange region of the	e collected described in alysis or altition of a present at a TWA of a means that ast above these posure to these contain and fate of any and the body article. HSE and 'inhalable' airborne as therefore approximates

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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definitions and explanatory material are given in MDHS14/4., 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 limit should be used.

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
aluminium powder (stabilised)	Workers	Inhalation	Long-term systemic effects	3.72 mg/m3
	Workers	Inhalation	Long-term local effects	3.72 mg/m3
	Consumers	Oral	Long-term systemic effects	3.95 mg/kg
Fatty acids, C16-18	Workers	Dermal	Long-term systemic effects	10 mg/kg
	Workers	Inhalation	Long-term systemic effects	17.632 mg/m3
	Consumers	Oral	Long-term systemic effects	2.5 mg/kg
	Consumers	Dermal	Long-term systemic effects	5 mg/kg
	Consumers	Inhalation	Long-term systemic effects	4.348 mg/m3

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
aluminium powder (stabilised)	Fresh water	0.0749 mg/l
	clarification plant	20 mg/l

8.2 Exposure controls

Personal protective equipment

Eye/face protection : Face-shield

Tightly fitting safety goggles

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.

The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Skin and body protection : Anti-static and fire resistant protective clothing. DIN EN

11612; EN 533; EN 1149-1. Anti-static safety shoes.

Dust impervious protective suit

Choose body protection according to the amount and

concentration of the dangerous substance at the work place.

Respiratory protection : Use suitable breathing protection if workplace concentration

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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requires.

Breathing apparatus with filter.

P1 filter

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form : powder

Colour : silver

Odour : characteristic

Odour Threshold : No data available

Melting point/ range : > 600 °C

Boiling point/boiling range : No data available

Flammability : The substance or mixture is a flammable solid with the

category 1.

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

30 g/m3

Flash point : No data available

Auto-ignition temperature : 340 °C

Decomposition temperature : No data available

pH : substance/mixture is non-soluble (in water)

Viscosity, kinematic : No data available

Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

: No data available

Vapour pressure : No data available

Relative density : No data available

Density : 2.5 g/cm3

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Relative vapour density : No data available

Particle characteristics

Particle Size Distribution : $1 - 15 \mu m$

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.

No decomposition if stored and applied as directed.

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

Water

10.6 Hazardous decomposition products

This information is not available.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Not classified due to lack of data.

Components:

aluminium powder (stabilised):

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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Acute inhalation toxicity : LC50 (Rat): > 5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Skin corrosion/irritation

Not classified due to lack of data.

Serious eye damage/eye irritation

Not classified due to lack of data.

Respiratory or skin sensitisation

Skin sensitisation

Not classified due to lack of data.

Respiratory sensitisation

Not classified due to lack of data.

Germ cell mutagenicity

Not classified due to lack of data.

Carcinogenicity

Not classified due to lack of data.

Reproductive toxicity

Not classified due to lack of data.

STOT - single exposure

Not classified due to lack of data.

STOT - repeated exposure

Not classified due to lack of data.

Aspiration toxicity

Not classified due to lack of data.

11.2 Information on other hazards

Further information

Product:

Remarks : No data available

SECTION 12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

Product:

Additional ecological

information

: No data available

SECTION 13: Disposal considerations

European Waste Catalogue : 10 03 21* - Wastes from thermal aluminium metallurgy, other

particles and dust (including ball mill dust) containing

dangerous substances

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 or ID number

 ADR
 : UN 1309

 IMDG
 : UN 1309

 IATA
 : UN 1309

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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14.2 UN proper shipping name

ADR : ALUMINIUM POWDER, COATED IMDG : ALUMINIUM POWDER, COATED

IATA : Aluminium powder, coated

14.3 Transport hazard class(es)

Class Subsidiary risks

 ADR
 : 4.1

 IMDG
 : 4.1

 IATA
 : 4.1

14.4 Packing group

ADR

Packing group : II
Classification Code : F3
Hazard Identification Number : 40
Labels : 4.1
Tunnel restriction code : (E)

IMDG

Packing group : II Labels : 4.1 EmS Code : F-G, S-G

Remarks : IMDG Code segregation group 15 - Powdered metals

IATA (Cargo)

Packing instruction (cargo : 448

aircraft)

Packing instruction (LQ) : Y441
Packing group : II
Labels : 4.1

IATA (Passenger)

Packing instruction : 445

(passenger aircraft)

Packing instruction (LQ) : Y441
Packing group : II
Labels : 4.1

14.5 Environmental hazards

ADR

Environmentally hazardous : no

IMDG

Marine pollutant : no

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



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14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances. mixtures and articles (Annex XVII)

Conditions of restriction for the following entries should be considered:

Number on list 40: aluminium

powder (stabilised)

UK REACH Candidate list of substances of very high

concern (SVHC) for Authorisation

The Persistent Organic Pollutants Regulations (retained

Regulation (EU) 2019/1021 as amended for Great

Britain)

Regulation (EC) on substances that deplete the ozone

laver

UK REACH List of substances subject to authorisation

(Annex XIV)

Seveso III: Directive 2012/18/EU of the

European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Not applicable

Not applicable

Not applicable

Not applicable

Not applicable

15.2 Chemical safety assessment

No data available

SECTION 16: Other information

Full text of H-Statements

H228 Flammable solid.

Full text of other abbreviations

Flam. Sol. Flammable solids

GB EH40 UK. EH40 WEL - Workplace Exposure Limits

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GB EH40 / TWA : Long-term exposure limit (8-hour TWA reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN -Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency: EC-Number - European Community number: ECx -Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA -International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID -Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture:

Classification procedure:

Flam. Sol. 1 H228 Based on product data or assessment

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.

GB / EN