

## STANDART PCR 801 Aluminium Powder

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 06/29/2021

 2.2
 10/16/2023
 102000000283
 Date of first issue: 03/21/2018

#### **SECTION 1. IDENTIFICATION**

Product name : STANDART PCR 801 Aluminium Powder

Product code : 000235F20

Manufacturer or supplier's details

Company name of supplier : ECKART America Corporation

Address : 830 East Erie Street

Painesville OH 44077

Telephone : 866-458-7837

(440) 954-7600

Telefax : (440) 354-6224

e-mail adresse : info.eckart.america.oh@altana.com

Emergency telephone : CHEMTREC: 800-424-9300

CHEMTREC: 1-703-527-3387 (International)

NCEC:

(contract no. ECKART29003-NCEC) US: +1 866 928 0789 (Toll free) Canada: +1 800 579 7421 (Toll Free)

Mexico: +52 55 5004 8763

#### **SECTION 2. HAZARDS IDENTIFICATION**

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable solids : Category 1

Combustible dust

**GHS** label elements

Hazard pictograms :



Signal Word : Danger

Hazard Statements : H228 Flammable solid.

May form combustible dust concentrations in air.

Precautionary Statements : Prevention:

P210 Keep away from heat/ sparks/ open flames/

hot surfaces. No smoking.



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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.

Other hazards

None known.

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous ingredients

Chemical name	CAS-No.	Concentration (% w/w)
Aluminum	7429-90-5	>= 90 - <= 100
Silica	7631-86-9	>= 5 - < 10

Actual concentration is withheld as a trade secret

#### **SECTION 4. FIRST AID MEASURES**

General advice : Take the victim into fresh air.

Move out of dangerous area.

Show this material 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.

Most important symptoms : None known.



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and effects, both acute and delayed

#### **SECTION 5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media Dry sand

Special powder against metal fire

Unsuitable extinguishing

media

ABC powder

Carbon dioxide (CO2)

Water Foam

High volume water jet

Specific hazards during fire

fighting

Contact with water liberates extremely flammable gas

(hydrogen).

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.

Special protective equipment

for fire-fighters

Wear self-contained breathing apparatus for firefighting if

necessary.

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

Evacuate personnel to safe areas.

Avoid dust formation.

Remove all sources of ignition.

Environmental precautions 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.

Methods and materials for containment and 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.



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#### **SECTION 7. HANDLING AND STORAGE**

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.

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.

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

Conditions for safe storage : 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 well-ventilated

place.

Electrical installations / working materials must comply with

the technological safety standards.

Protect from humidity and water.

measures/Precautions Materials to avoid

Technical

: 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.

Further information on storage stability

Keep in a dry place.



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### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Aluminum	7429-90-5	TWA (total dust)	50 Million particles per cubic foot	OSHA Z-3
		TWA (Respirable)	5 mg/m3	NIOSH REL
		TWA (total dust)	15 mg/m3	OSHA Z-3
		TWA (total)	10 mg/m3	NIOSH REL
		TWA (respirable fraction)	5 mg/m3	OSHA Z-3
		TWA (respirable fraction)	15 Million particles per cubic foot	OSHA Z-3
		TWA (Respirable particulate matter)	1 mg/m3	ACGIH
		TWA	5 mg/m3 (Aluminum)	NIOSH REL
		TWA (Total)	15 mg/m3 (Aluminum)	OSHA P0
		TWA (Respirable fraction)	5 mg/m3 (Aluminum)	OSHA P0
		TWA (total dust)	15 mg/m3 (Aluminum)	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3 (Aluminum)	OSHA Z-1
		TWA (Total dust)	15 mg/m3 (Aluminum)	OSHA P0
		TWA (respirable dust fraction)	5 mg/m3 (Aluminum)	OSHA P0
		TWA (welding fumes)	5 mg/m3 (Aluminum)	NIOSH REL



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		TWA (pyro powders)	5 mg/m3 (Aluminum)	NIOSH REL
		TWA (Respirable particulate matter)	1 mg/m3 (Aluminum)	ACGIH
		TWA (Fumes)	5 mg/m3	OSHA P0
		TWA (powder)	5 mg/m3 (Aluminum)	OSHA P0
Silica	7631-86-9	TWA (Dust)	20 Million particles per cubic foot (Silica)	OSHA Z-3
		TWA (Dust)	80 mg/m3 / %SiO2 (Silica)	OSHA Z-3
		TWA	6 mg/m3 (Silica)	NIOSH REL

#### Personal protective equipment

Respiratory protection : Use suitable breathing protection if workplace concentration

requires.

Breathing apparatus with filter.

P1 filter

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.

Eye protection : Face-shield

Tightly fitting safety goggles

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.

Hygiene measures : Wash hands before breaks and at the end of workday.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES** 



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Appearance powder Color silver

Odor characteristic Odor Threshold No data available

pΗ substance/mixture is non-soluble (in water)

Melting point/freezing point : > 600 °C

Initial boiling point and boiling :

range

Flash point No data available Evaporation rate No data available

Flammability (solid, gas) The substance or mixture is a flammable solid with the

No data available

category 1.

30 g/m3

combustible dust

No data available

Upper explosion limit / Upper

flammability limit

Lower explosion limit / Lower

flammability limit

Vapor pressure No data available Relative density No data available 2.5 g/cm3

Density

Solubility(ies)

Water solubility insoluble

Partition coefficient: n-

octanol/water

Autoignition temperature 340 °C

Decomposition temperature No data available No data available Viscosity

### **SECTION 10. STABILITY AND REACTIVITY**

No decomposition if stored and applied as directed. Reactivity No decomposition if stored and applied as directed.

No data available

Chemical stability Possibility of hazardous Contact with acids and alkalis may release hydrogen. reactions

No decomposition if stored and applied as directed.

Dust may form explosive mixture in air.

Conditions to avoid Heat, flames and sparks.

Incompatible materials Acids Bases

Oxidizing agents

Water



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#### **SECTION 11. TOXICOLOGICAL INFORMATION**

## **Acute toxicity**

Not classified based on available information.

#### Components:

Silica:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

(Mouse): 15,000 mg/kg

Acute inhalation toxicity : (Rat): 0.139 mg/l

Exposure time: 4 h

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

#### Skin corrosion/irritation

Not classified based on available information.

## Serious eye damage/eye irritation

Not classified based on available information.

## Respiratory or skin sensitization

#### Skin sensitization

Not classified based on available information.

## Respiratory sensitization

Not classified based on available information.

#### Germ cell mutagenicity

Not classified based on available information.

#### Carcinogenicity

Not classified based on available information.

IARC No ingredient of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

OSHA No component of this product present at levels greater than or

equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.



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### Reproductive toxicity

Not classified based on available information.

## STOT-single exposure

Not classified based on available information.

### STOT-repeated exposure

Not classified based on available information.

## **Aspiration toxicity**

Not classified based on available information.

**Further information** 

#### **SECTION 12. ECOLOGICAL INFORMATION**

### **Ecotoxicity**

## **Components:**

Silica:

Toxicity to daphnia and other :

aquatic invertebrates

(Daphnia): 7,600 mg/l

Toxicity to algae : (Chlorella pyrenoidosa): 440 mg/l

#### Persistence and degradability

No data available

### Bioaccumulative potential

No data available

## Other adverse effects

No data available

## **Components:**

Silica:

Additional ecological

: No data available

information

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

Disposal methods

Waste from residues : 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.



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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**

### **Domestic regulation**

**49 CFR** 

UN/ID/NA number : UN 1309

Proper shipping name : Aluminum powder, coated

Class : 4.1 Packing group : II

Labels : FLAMMABLE SOLID

ERG Code : 170 Marine pollutant : no

International Regulations

IATA-DGR

UN/ID No. : UN 1309

Proper shipping name : Aluminium powder, coated

Class : 4.1 Packing group : II

Labels : Flammable Solid

Packing instruction (cargo : 448

aircraft)

Packing instruction : 445

(passenger aircraft)

IMDG-Code

UN number : UN 1309

Proper shipping name : ALUMINIUM POWDER, COATED

Class : 4.1
Packing group : II
Labels : 4.1
Marine pollutant : no

Remarks : IMDG Code segregation group 15 - Powdered metals

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

Not applicable for product as supplied.



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#### **SECTION 15. REGULATORY INFORMATION**

#### **EPCRA - Emergency Planning and Community Right-to-Know**

### **CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

### SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)

Combustible dust

SARA 313 : The following components are subject to reporting levels

established by SARA Title III, Section 313:

Aluminum 7429-90-5 >= 90 - <= 100 %

#### Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

#### Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307 This product does not contain any priority pollutants related to the U.S. Clean Water Act

## **US State Regulations**

#### Massachusetts Right To Know

Aluminum 7429-90-5

Silica 7631-86-9

#### Pennsylvania Right To Know



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Aluminum 7429-90-5

Silica 7631-86-9

### California Prop. 65



WARNING: This product can expose you to chemicals including lead and cadmium, which is/are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

#### California List of Hazardous Substances

Aluminum 7429-90-5

Silica 7631-86-9

#### California Permissible Exposure Limits for Chemical Contaminants

Aluminum 7429-90-5

Silica 7631-86-9

#### The ingredients of this product are reported in the following inventories:

DSL : All components of this product are on the Canadian DSL

TSCA : On TSCA Inventory

#### **TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

#### **SECTION 16. OTHER INFORMATION**

#### Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL : USA. NIOSH Recommended Exposure Limits

OSHA PO : USA. Table Z-1-A Limits for Air Contaminants (1989 vacated

values)

OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1

Limits for Air Contaminants

OSHA Z-3 : USA. Occupational Exposure Limits (OSHA) - Table Z-3

Mineral Dusts

ACGIH / TWA : 8-hour, time-weighted average



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NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour

workday during a 40-hour workweek

OSHA P0 / TWA : 8-hour time weighted average OSHA Z-1 / TWA : 8-hour time weighted average OSHA Z-3 / TWA : 8-hour time weighted average

AllC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; 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; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; 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: MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; 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; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature: SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA -Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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The information provided in this Material 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



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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.

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