

STANDART RESIST 211 Aluminium Powder

Version 1.0 Revision Date: 03/21/2018 SDS Number: 102000000283 Date of last issue: -
Date of first issue: 03/21/2018

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : STANDART RESIST 211 Aluminium Powder
Product code : 049185D70

Manufacturer or supplier's details

Company name of supplier : ECKART GmbH
Address : Guentersthal 4
Hartenstein 91235
Telephone : +499152770
Telefax : +499152777008
Emergency telephone number : CHEMTREC: 800-424-9300
CHEMTREC: 1-703-527-3387 (International)

GBK Gefahrgut Buero 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**GHS Classification**

Flammable solids : Category 1

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H228 Flammable solid.

Precautionary statements : **Prevention:**
P210 Keep away from heat, hot surfaces, sparks,

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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.

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 components**

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

SECTION 4. FIRST AID MEASURES

General advice : Move the victim to fresh air.
Move out of dangerous area.

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.

If on skin, rinse well with 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.

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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 and effects, both acute and delayed : None known.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Dry sand
Special powder against metal fire

Unsuitable extinguishing media : ABC powder
Carbon dioxide (CO₂)
Water
Foam

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

Specific extinguishing methods : Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special protective equipment for firefighters : 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 :

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.

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Do not flush with water.
Keep in suitable, closed containers for disposal.

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.
- 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.
Dispose of rinse water in accordance with local and national regulations.
- Hygiene measures : Wash hands before breaks and at the end of workday.
- 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.
- Materials to avoid : Do not store together with oxidizing and self-igniting products.
Never allow product to get in contact with water during storage.

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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.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Aluminum	7429-90-5	LMPE-PPT	10 mg/m ³	MX OEL
		LMPE-PPT (Dust)	10 mg/m ³	MX OEL
		TWA (Respirable fraction)	1 mg/m ³	ACGIH
		TWA (Respirable fraction)	1 mg/m ³ (Aluminium)	ACGIH
Silica	7631-86-9	LMPE-PPT (Respirable)	3 mg/m ³	MX OEL
		LMPE-PPT (Inhalable)	10 mg/m ³	MX OEL

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

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with the producers of the protective gloves.

Eye protection	:	Face-shield Safety glasses
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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	powder
Colour	:	silver
Odour	:	odourless
Odour Threshold	:	No data available
pH	:	No data available
Melting point/freezing point	:	660 °C
Boiling point/boiling range	:	2,467 °C
Flash point	:	No data available
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	30 g/m ³
Vapour pressure	:	No data available
Relative density	:	No data available
Density	:	2.5 g/cm ³
Solubility(ies)	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Auto-ignition temperature	:	340 °C
Decomposition temperature	:	No data available
Viscosity	:	No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	No decomposition if stored and applied as directed.

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Possibility of hazardous reactions : Contact with acids and alkalis may release hydrogen.
Stable under recommended storage conditions.
Dust may form explosive mixture in air.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Acids
Bases
Oxidizing agents
Water

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 sensitisation**Skin sensitisation**

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

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Carcinogenicity

Not classified based on available information.

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 : (Daphnia (water flea)): 7,600 mg/l
aquatic invertebrates

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

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Other adverse effects

No data available

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.
In accordance with local and national regulations.

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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.
 In accordance with local and national regulations.

SECTION 14. TRANSPORT INFORMATION

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 aircraft) : 448
 Packing instruction (passenger aircraft) : 445

IMDG-Code

UN number : UN 1309
 Proper shipping name : ALUMINIUM POWDER, COATED
 Class : 4.1
 Packing group : II
 Labels : 4.1
 EmS Code : F-G, S-G
 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.

National Regulations

NOM-002-SCT

UN number : UN 1309
 Proper shipping name : ALUMINIUM POWDER, COATED
 Class : 4.1
 Packing group : II
 Labels : 4.1

Special precautions for user

Not applicable

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SECTION 15. REGULATORY INFORMATION**Safety, health and environmental regulations/legislation specific for the substance or mixture**

Federal Law for the control of chemical precursors, : Not applicable
essential chemical products and machinery for
producing capsules, tablets and pills.

The components of this product are reported in the following inventories:

DSL : All components of this product are on the Canadian DSL
TSCA : On TSCA Inventory

SECTION 16. OTHER INFORMATION**Full text of other abbreviations**

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
MX OEL : Mexico. Occupational Exposure Limits
ACGIH / TWA : 8-hour, time-weighted average
MX OEL / LMPE-PPT : Time weighted average

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); 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; ERG - Emergency Response Guide; 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; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; 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; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data

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Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; 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; WHMIS - Workplace Hazardous Materials Information System

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