

Globally Harmonized System of Classification and Labelling of  
Chemicals (GHS)

**POWDERSAFE 2080-02 Silver**

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Trade name : POWDERSAFE 2080-02 Silver  
Material number : 052872GD0

**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 :  
  
Telephone :  
Telefax :  
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 hazardous substance or mixture.

**GHS-Labeling**

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

## POWDERSAFE 2080-02 Silver

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

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 name : POWDERSAFE 1080-01 SILBER

Substance No. :

### Hazardous components

Chemical name	CAS-No. EINECS-No.	Classification and labelling	Concentration[%]
aluminium powder (stabilised)	7429-90-5 231-072-3	Flam. Sol.;1;H228	60 - 100

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.

**POWDERSAFE 2080-02 Silver**

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

- In case of eye contact : Remove contact lenses.  
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**

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 (CO<sub>2</sub>), 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.

Globally Harmonized System of Classification and Labelling of  
Chemicals (GHS)

## POWDERSAFE 2080-02 Silver

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

---

### 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

This information is not available.

#### 6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Use mechanical handling equipment.  
  
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 : For personal protection see section 8. Smoking, eating and  
drinking should be prohibited in the application area.  
  
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 : Provide appropriate exhaust ventilation at places where dust

**POWDERSAFE 2080-02 Silver**

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

fire and explosion is formed.

Hygiene measures : General industrial hygiene practice.

**7.2 Conditions for safe storage, including any incompatibilities**

Requirements for storage areas and containers : 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.

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 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 oxidizing agents and strongly acid or alkaline materials.

Other data : 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 powder	7429-90-5	AGW (Inhalable fraction)	10 mg/m <sup>3</sup>	2014-04-02	DE TRGS 900

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

## POWDERSAFE 2080-02 Silver

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

(stabilised)					
Peak-limit: excursion factor (category)	2;(II)				
Further information	Commission for dangerous substancesSenate commission for the review of compounds at the work place dangerous for the health (MAK-commission).				
aluminium powder (stabilised)	7429-90-5	AGW (Alveolate fraction)	1,25 mg/m <sup>3</sup>	2014-04-02	DE TRGS 900
Peak-limit: excursion factor (category)	2;(II)				
Further information	Commission for dangerous substancesSenate commission for the review of compounds at the work place dangerous for the health (MAK-commission).				
silicon dioxide	7631-86-9	AGW (Inhalable fraction)	4 mg/m <sup>3</sup>	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 powder (stabilised)	7429-90-5	TWA (total dust)	50 Million particles per cubic foot	2012-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable)	5 mg/m <sup>3</sup>	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (total dust)	15 mg/m <sup>3</sup>	2012-07-01	
aluminium	7429-90-5	TWA (total)	10 mg/m <sup>3</sup>	2013-10-08	

**POWDERSAFE 2080-02 Silver**

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

powder (stabilised)					
aluminium powder (stabilised)	7429-90-5	TWA (respirable fraction)	5 mg/m <sup>3</sup>	2012-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (respirable fraction)	15 Million particles per cubic foot	2012-07-01	
aluminium powder (stabilised)	7429-90-5	PEL (Total dust)	10 mg/m <sup>3</sup>	2014-11-26	
aluminium powder (stabilised)	7429-90-5	PEL (respirable dust fraction)	5 mg/m <sup>3</sup>	2014-11-26	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable fraction)	1 mg/m <sup>3</sup>	2008-01-01	
aluminium powder (stabilised)	7429-90-5	TWA	5 mg/m <sup>3</sup>	2005-09-01	
aluminium powder (stabilised)	7429-90-5	TWA (Total)	15 mg/m <sup>3</sup>	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable fraction)	5 mg/m <sup>3</sup>	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (total dust)	15 mg/m <sup>3</sup>	2011-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (respirable fraction)	5 mg/m <sup>3</sup>	2011-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (Total dust)	15 mg/m <sup>3</sup>	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (respirable dust fraction)	5 mg/m <sup>3</sup>	1989-01-19	

**POWDERSAFE 2080-02 Silver**

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

aluminium powder (stabilised)	7429-90-5	TWA (welding fumes)	5 mg/m3	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (pyro powders)	5 mg/m3	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable fraction)	1 mg/m3	2013-03-01	
aluminium powder (stabilised)	7429-90-5	TWA (Fumes)	5 mg/m3	1989-01-19	
aluminium powder (stabilised)	7429-90-5	PEL (Welding fumes)	5 mg/m3	2017-10-02	
aluminium powder (stabilised)	7429-90-5	PEL (Pyro powders)	5 mg/m3	2017-10-02	
silicon dioxide	7631-86-9	TWA (Dust)	20 Million particles per cubic foot	2012-07-01	
silicon dioxide	7631-86-9	TWA (Dust)	80 mg/m3 / %SiO <sub>2</sub>	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 : Safety glasses

Hand protection

Material : Protective gloves



**POWDERSAFE 2080-02 Silver**

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

- Remarks : The suitability for a specific workplace should be discussed with the producers of the protective 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 exact break through time can be obtained from the protective glove producer and this has to be observed.
- Skin and body protection : Long sleeved clothing
- Respiratory protection : Use suitable breathing protection if workplace concentration requires.  
 Breathing apparatus with filter.  
 P1 filter
- : No personal respiratory protective equipment normally required.

**Environmental exposure controls**

- 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 : pellets
- Colour : silver
- Odour : odourless
- pH : No data available

**POWDERSAFE 2080-02 Silver**

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

Melting point/range	: 100 - 120 °C
Boiling point/boiling range	: Not applicable 2 467 °C
Flash point	: Not applicable
Bulk density	: No data available
Flammability (solid, gas)	: Combustible Solids
Auto-flammability	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Density	: 2,1 g/cm <sup>3</sup> (ca. )
Water solubility	: No data available
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**

Self-Accelerating decomposition temperature (SADT) : No data available

**POWDERSAFE 2080-02 Silver**

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

---

Self-heating substances	: No data available
Heat of combustion	: No data available
Impact sensitivity	: No data available
Surface tension	: No data available
Conductivity	: No data available
Sublimation point	: No data available
Molecular weight	: 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

**POWDERSAFE 2080-02 Silver**

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

Oxidizing agents  
Water**10.6 Hazardous decomposition products**

Hazardous decomposition products : No data available

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

**POWDERSAFE 2080-02 Silver**

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

---

**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**

**POWDERSAFE 2080-02 Silver**

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

---

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****14.2 Proper shipping name**

**POWDERSAFE 2080-02 Silver**

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

**14.3 Transport hazard class****14.4 Packing group****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

**15.2 Chemical safety assessment**

No data available

---

**SECTION 16: Other information****Full text of H-Statements**

H228 : Flammable solid.

Globally Harmonized System of Classification and Labelling of  
Chemicals (GHS)

**POWDERSAFE 2080-02 Silver**

Version 2.0

Revision Date 05.12.2019

Print Date 07.08.2020

---

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.