

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## ROTOSAFE 910 SILVER

Version 2.0      Revision Date: 07.12.2019      SDS Number: 102000029736      Print Date: 06.08.2020  
Date of first issue: 19.07.2018

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

#### 1.1 Product identifier

Trade name : ROTOSAFE 910 SILVER

Product code : 024027DA0

#### 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 :

E-mail address of person responsible for the SDS : msds.eckart@altana.com

#### 1.4 Emergency telephone number

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### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

**Classification (REGULATION (EC) No 1272/2008)**

Not a dangerous substance according to GHS.

#### 2.2 Label elements

**Labelling (REGULATION (EC) No 1272/2008)**

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS).

#### 2.3 Other hazards

Combustible Solids

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.

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### SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

##### Hazardous components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification REGULATION (EC) No 1272/2008	Concentration (% w/w)

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## ROTOSAFE 910 SILVER

Version 2.0      Revision Date: 07.12.2019      SDS Number: 102000029736      Print Date: 06.08.2020  
Date of first issue: 19.07.2018

aluminium powder (stabilised)	7429-90-5 231-072-3 01-2119529243-45	Flam. Sol. 1; H228	>= 50 - <= 100
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For explanation of abbreviations 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 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

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 : Contact with water liberates extremely flammable gas

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## ROTOSAFE 910 SILVER

Version	Revision Date:	SDS Number:	Print Date:
2.0	07.12.2019	102000029736	06.08.2020
			Date of first issue: 19.07.2018

---

firefighting (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.

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## 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

### 6.3 Methods and material 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

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling : Avoid dust formation.  
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.

Advice on protection against fire and explosion : Provide appropriate exhaust ventilation at places where dust is formed.

Hygiene measures : General industrial hygiene practice.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## RTOSAFE 910 SILVER

Version 2.0      Revision Date: 07.12.2019      SDS Number: 102000029736      Print Date: 06.08.2020  
Date of first issue: 19.07.2018

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

- Requirements for storage areas and containers : 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.
- Further information on storage stability : 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

#### Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
aluminium powder (stabilised)	7429-90-5	TWA (Inhalable)	10 mg/m <sup>3</sup>	GB EH40
Further information	The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m <sup>-3</sup> 8-hour TWA of inhalable dust or 4 mg.m <sup>-3</sup> 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.			
		TWA (Respirable)	4 mg/m <sup>3</sup>	GB EH40
Further information	The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m <sup>-3</sup> 8-hour TWA of inhalable dust or 4 mg.m <sup>-3</sup> 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.			
		TWA (inhalable dust)	10 mg/m <sup>3</sup>	GB EH40
Further information	For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/4 General methods for sampling and gravimetric analysis or respirable,			

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## RTOSAFE 910 SILVER

Version  
2.0

Revision Date:  
07.12.2019

SDS Number:  
102000029736

Print Date: 06.08.2020  
Date of first issue: 19.07.2018

	<p>thoracic and inhalable aerosols, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m<sup>-3</sup> 8-hour TWA of inhalable dust or 4 mg.m<sup>-3</sup> 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system, and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller 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.</p>				
	<table border="1"><tr><td></td><td>TWA (Respirable dust)</td><td>4 mg/m<sup>3</sup></td><td>GB EH40</td></tr></table>		TWA (Respirable dust)	4 mg/m <sup>3</sup>	GB EH40
	TWA (Respirable dust)	4 mg/m <sup>3</sup>	GB EH40		
Further information	<p>For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/4 General methods for sampling and gravimetric analysis or respirable, thoracic and inhalable aerosols, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m<sup>-3</sup> 8-hour TWA of inhalable dust or 4 mg.m<sup>-3</sup> 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed to dust above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limits., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system, and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'. Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller 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.</p>				

### 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 local effects	3.72 mg/m <sup>3</sup>
	Consumers	Oral	Long-term systemic	3.95 mg/kg

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## RTOSAFE 910 SILVER

Version  
2.0

Revision Date:  
07.12.2019

SDS Number:  
102000029736

Print Date: 06.08.2020  
Date of first issue: 19.07.2018

			effects	
	Workers	Inhalation	Long-term systemic effects	3.72 mg/m3
Rosin, hydrogenated	Workers	Skin contact	Long-term systemic effects	17 mg/kg
	Workers	Inhalation	Long-term systemic effects	117 mg/m3
	Consumers	Ingestion	Long-term systemic effects	10 mg/kg
	Consumers	Skin contact	Long-term systemic effects	10 mg/kg
	Consumers	Inhalation	Long-term systemic effects	35 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
Rosin, hydrogenated	Soil	0.00045 mg/kg
	Fresh water	0.0016 mg/l
	Fresh water sediment	0.007 mg/kg
	Intermittent Release	0.016 mg/l
	Marine water	0.00016 mg/l
	Marine sediment	0.0007 mg/kg
	STP	1000 mg/l

## 8.2 Exposure controls

### Personal protective equipment

Eye protection : Safety glasses

Hand protection

Material : Protective gloves

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.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## RTOSAFE 910 SILVER

Version 2.0      Revision Date: 07.12.2019      SDS Number: 102000029736      Print Date: 06.08.2020  
Date of first issue: 19.07.2018

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### Environmental exposure controls

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

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance : pellets

Colour : silver

Odour : odourless

Odour Threshold : No data available

pH : No data available

Freezing point : No data available

Boiling point/boiling range : No data available

Flash point : Not applicable

Evaporation rate : No data available

Flammability (solid, gas) : Combustible Solids

Self-ignition : No data available

Auto-ignition temperature : No data available

Smoldering temperature : No data available

Decomposition temperature : No data available

Explosive properties : No data available

Oxidizing properties : No data available

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Vapour pressure : No data available

Relative vapour density : No data available

Relative density : No data available

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## ROTOSAFE 910 SILVER

Version 2.0      Revision Date: 07.12.2019      SDS Number: 102000029736      Print Date: 06.08.2020  
Date of first issue: 19.07.2018

---

Density : No data available  
Bulk density : No data available  
Water solubility : No data available  
Solubility in other solvents : No data available  
Partition coefficient: n-octanol/water : No data available  
Decomposition temperature : 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

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## 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

Contact with water or humid : This information is not available.



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## ROTOSAFE 910 SILVER

Version  
2.0

Revision Date:  
07.12.2019

SDS Number:  
102000029736

Print Date: 06.08.2020  
Date of first issue: 19.07.2018

---

air

Thermal decomposition : This information is not available.

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### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

##### Acute toxicity

Not classified based on available information.

##### Components:

##### aluminium powder (stabilised):

Acute inhalation toxicity : LC50 (Rat): > 5 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist

##### 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.

##### 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.

# SAFETY DATA SHEET

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## ROTOSAFE 910 SILVER

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### Further information

**Product:**

Remarks: No data available

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## 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

**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 Other adverse effects

**Product:**

Additional ecological information : No data available

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## SECTION 13: Disposal considerations

European Waste Catalogue : 12 01 04 - non-ferrous metal dust and particles  
European Waste Catalogue : 10 03 21 - other particulates and dust (including ball-mill dust) containing hazardous substances

### 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.

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# SAFETY DATA SHEET

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## ROTOSAFE 910 SILVER

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### SECTION 14: Transport information

#### 14.1 UN number

#### 14.2 UN proper shipping name

#### 14.3 Transport hazard class(es)

#### 14.4 Packing group

#### 14.5 Environmental hazards

#### 14.6 Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regulations.

#### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

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### 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 (EC) No 850/2004 on persistent organic pollutants : Not applicable

#### 15.2 Chemical safety assessment

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### 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

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 - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging

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# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## RTOSAFE 910 SILVER

Version	Revision Date:	SDS Number:	Print Date: 06.08.2020
2.0	07.12.2019	102000029736	Date of first issue: 19.07.2018

---

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; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

### Further information

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.

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