

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

**STAPA WM REFLEXAL 211/80 Aluminium Paste**

Version 2.0

Revision Date 09.12.2019

Print Date 25.02.2022

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

Trade name : STAPA WM REFLEXAL 211/80 Aluminium Paste  
Material number : 050667GD0

**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 : ECKART GmbH  
Guentersthal 4  
91235 Hartenstein  
Telephone : +499152770  
Telefax : +499152777008  
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)

**STAPA WM REFLEXAL 211/80 Aluminium Paste**

Version 2.0

Revision Date 09.12.2019

Print Date 25.02.2022

Not a hazardous substance or mixture.

**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 : STAPA WM REFLEXAL 211/80

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	50 - 100
Fatty acids, C14-18 and C16-18-unsatd.	67701-06-8 266-930-6	Acute Tox.;5;H313	1 - 10

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.  
Do not leave the victim unattended.

No hazards which require special first aid measures.

If inhaled : If unconscious, place in recovery position and seek medical

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

**STAPA WM REFLEXAL 211/80 Aluminium Paste**

Version 2.0

Revision Date 09.12.2019

Print Date 25.02.2022

- 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 : Immediately flush eye(s) with plenty of water.  
  
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 : Water, Foam, ABC powder, Carbon dioxide (CO<sub>2</sub>)

**5.2 Special hazards arising from the substance or mixture**

This information is not available.

**5.3 Advice for firefighters**

- Special protective equipment for firefighters : Use personal protective equipment.

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

**STAPA WM REFLEXAL 211/80 Aluminium Paste**

Version 2.0

Revision Date 09.12.2019

Print Date 25.02.2022

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.

---

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions : Evacuate personnel to safe areas.  
Use personal protective equipment.  
Remove all sources of ignition.  
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.  
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
  
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**

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

**STAPA WM REFLEXAL 211/80 Aluminium Paste**

Version 2.0

Revision Date 09.12.2019

Print Date 25.02.2022

- Advice on safe handling : Keep away from heat and sources of ignition. Avoid dust formation. Ensure adequate ventilation.
- For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.
- Advice on protection against fire and explosion : Keep away from open flames, hot surfaces and sources of ignition. Earthing of containers and apparatuses is essential.
- Normal measures for preventive fire protection.
- 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 container closed when not in use. Keep away from sources of ignition - No smoking.
- Electrical installations / working materials must comply with the technological safety standards.
- Further information on storage conditions : Protect from humidity and water. Do not allow to dry.
- 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.
- Other data : No decomposition if stored and applied as directed.

**7.3 Specific end use(s)**

This information is not available.

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

## STAPA WM REFLEXAL 211/80 Aluminium Paste

Version 2.0

Revision Date 09.12.2019

Print Date 25.02.2022

### 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 (stabilised)	7429-90-5	AGW (Inhalable fraction)	10 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).				
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).				
White mineral oil (petroleum)	8042-47-5	AGW (Alveolate fraction)	5 mg/m <sup>3</sup>	2015-11-06	DE TRGS 900
Peak-limit: excursion factor (category)	4;(II)				
Further information	Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).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):

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

**STAPA WM REFLEXAL 211/80 Aluminium Paste**

Version 2.0

Revision Date 09.12.2019

Print Date 25.02.2022

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/m3	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (total dust)	15 mg/m3	2012-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (total)	10 mg/m3	2013-10-08	
aluminium powder (stabilised)	7429-90-5	TWA (respirable fraction)	5 mg/m3	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/m3	2014-11-26	
aluminium powder (stabilised)	7429-90-5	PEL (respirable dust fraction)	5 mg/m3	2014-11-26	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable fraction)	1 mg/m3	2008-01-01	
aluminium powder (stabilised)	7429-90-5	TWA	5 mg/m3	2005-09-01	
aluminium powder (stabilised)	7429-90-5	TWA (Total)	15 mg/m3	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (Respirable fraction)	5 mg/m3	1989-01-19	

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

## STAPA WM REFLEXAL 211/80 Aluminium Paste

Version 2.0

Revision Date 09.12.2019

Print Date 25.02.2022

aluminium powder (stabilised)	7429-90-5	TWA (total dust)	15 mg/m3	2011-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (respirable fraction)	5 mg/m3	2011-07-01	
aluminium powder (stabilised)	7429-90-5	TWA (Total dust)	15 mg/m3	1989-01-19	
aluminium powder (stabilised)	7429-90-5	TWA (respirable dust fraction)	5 mg/m3	1989-01-19	
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	
White mineral oil (petroleum)	8042-47-5	TWA (Mist)	5 mg/m3	2011-07-01	
White mineral oil (petroleum)	8042-47-5	TWA	5 mg/m3	1989-01-19	
White mineral oil	8042-47-5	TWA (Mist)	5 mg/m3	2013-10-08	



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

## STAPA WM REFLEXAL 211/80 Aluminium Paste

Version 2.0

Revision Date 09.12.2019

Print Date 25.02.2022

(petroleum)					
White mineral oil (petroleum)	8042-47-5	ST (Mist)	10 mg/m <sup>3</sup>	2013-10-08	
White mineral oil (petroleum)	8042-47-5	TWA (Inhalable fraction)	5 mg/m <sup>3</sup>	2013-03-01	
White mineral oil (petroleum)	8042-47-5	TWA (Mist)	5 mg/m <sup>3</sup>	1989-01-19	
White mineral oil (petroleum)	8042-47-5	PEL (particulate)	5 mg/m <sup>3</sup>	2014-11-26	

### 8.2 Exposure controls

#### Personal protective equipment

Eye protection : Safety glasses

Hand protection

Material : Solvent-resistant gloves

Remarks

: Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).  
The exact break through time can be obtained from the protective glove producer and this has to be observed.  
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.  
Recommended preventive skin protection  
Skin should be washed after contact.

**STAPA WM REFLEXAL 211/80 Aluminium Paste**

Version 2.0

Revision Date 09.12.2019

Print Date 25.02.2022

The suitability for a specific workplace should be discussed  
with the producers of the protective gloves.

Skin and body protection : Long sleeved clothing  
Safety shoes  
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  
requires.

**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	: Pasty solid
Colour	: silver
Odour	: characteristic
pH	: No data available
Freezing point	: No data available
Boiling point/boiling range	: No data available
Flash point	: No data available
Bulk density	: No data available
Flammability (solid, gas)	: Combustible Solids

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

**STAPA WM REFLEXAL 211/80 Aluminium Paste**

Version 2.0

Revision Date 09.12.2019

Print Date 25.02.2022

Auto-flammability	: not auto-flammable
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Density	: 1,3 - 2,0 g/cm <sup>3</sup>
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
Explosive properties	: Not explosive Not explosive

**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**

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

**STAPA WM REFLEXAL 211/80 Aluminium Paste**

Version 2.0

Revision Date 09.12.2019

Print Date 25.02.2022

Hazardous reactions : Reacts with alkalis, acids, halogenes and oxidizing agents.  
Contact with acids and alkalis may release hydrogen.  
Mixture reacts slowly with water resulting in evolution of hydrogen.  
Vapour/air-mixtures are explosive at intense warming.

Stable under recommended storage conditions.

**10.4 Conditions to avoid**

Conditions to avoid : Do not allow to dry.

No data available

**10.5 Incompatible materials**

Materials to avoid : Acids  
Bases  
Oxidizing agents  
Highly halogenated compounds

**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****Components:**

**Fatty acids, C14-18 and C16-18-unsatd. :**

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

**STAPA WM REFLEXAL 211/80 Aluminium Paste**

Version 2.0

Revision Date 09.12.2019

Print Date 25.02.2022

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

Acute inhalation toxicity : LC50 Rat: > 46 mg/l

Exposure time: 1 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 Rabbit: > 3 160 mg/kg

**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

**Reprod.Tox./Development/Teratogenicity**

No data available

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

**STAPA WM REFLEXAL 211/80 Aluminium Paste**

Version 2.0

Revision Date 09.12.2019

Print Date 25.02.2022

**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**

No data available

**12.4 Mobility in soil**

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

**STAPA WM REFLEXAL 211/80 Aluminium Paste**

Version 2.0

Revision Date 09.12.2019

Print Date 25.02.2022

No data available

**12.5 Results of PBT and vPvB assessment**

No data available

**12.6 Other adverse effects****Product:**

Additional ecological : No data available  
information

---

**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****14.3 Transport hazard class****14.4 Packing group****14.5 Environmental hazards**

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

**STAPA WM REFLEXAL 211/80 Aluminium Paste**

Version 2.0

Revision Date 09.12.2019

Print Date 25.02.2022

**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****Prohibition/Restriction**

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

**Prohibition/Restriction**

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

**Prohibition/Restriction**

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

**15.2 Chemical safety assessment**

No data available



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

**STAPA WM REFLEXAL 211/80 Aluminium Paste**

Version 2.0

Revision Date 09.12.2019

Print Date 25.02.2022

---

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

H228 : Flammable solid.  
H313 : May be harmful in contact with skin.

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.