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
Product code: 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 of person responsible for the SDS: msds.eckart@altana.com

1.4 Emergency telephone number

GBK Gefahrgut Büro 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

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 dangerous substance or mixture according to the Globally Harmonised System (GHS).

2.3 Other hazards

Combustible Solids
None known.
SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Index-No.</th>
<th>Registration number</th>
<th>Classification</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>aluminium powder (stabilised)</td>
<td>7429-90-5</td>
<td>231-072-3</td>
<td>013-002-00-1</td>
<td>01-2119529243-45</td>
<td>Flam. Sol. 1; H228</td>
<td>&gt;= 50 - &lt;= 100</td>
</tr>
</tbody>
</table>

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. 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 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

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: Water
Foam
ABC powder
Carbon dioxide (CO2)

5.2 Special hazards arising from the substance or mixture

5.3 Advice for firefighters

Special protective equipment for firefighters: Use personal protective equipment.

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

6.3 Methods and material 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

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.

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.

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

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters</th>
<th>Basis (Version Date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>aluminium powder (stabilised)</td>
<td>7429-90-5</td>
<td>TWA (Respirable fraction)</td>
<td>1.5 mg/m³</td>
<td>SK OEL (2007-06-20)</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET  
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TWA (Inhalable fraction)  4 mg/m3  SK OEL (2007-06-20)
TWA (Solid aerosols, total fraction)  10 mg/m3  SK OEL (2007-06-20)
TWA (Solid aerosols, respirable fraction)  1,5 mg/m3  SK OEL (2007-06-20)
White mineral oil (petroleum)  8042-47-5  STEL  15 ppm 3 mg/m3  SK OEL (2011-11-23)

Further information  The limit applies to machine and hydraulic fluids and lubricants. Some oils may contain polycyclic aromatic hydrocarbons, which can be released when heated. This should be taken into account in measuring and assessing risks.

TWA  5 ppm 1 mg/m3  SK OEL (2011-11-23)
Further information  The limit applies to machine and hydraulic fluids and lubricants. Some oils may contain polycyclic aromatic hydrocarbons, which can be released when heated. This should be taken into account in measuring and assessing risks.

TWA (Liquid aerosol)  5 ppm 1 mg/m3  SK OEL (2011-11-23)
Further information  The limit applies to machine and hydraulic fluids and lubricants. Some oils may contain polycyclic aromatic hydrocarbons, which can be released when heated. This should be taken into account in measuring and assessing risks.

STEL (Liquid aerosol)  15 ppm 3 mg/m3  SK OEL (2011-11-23)
Further information  The limit applies to machine and hydraulic fluids and lubricants. Some oils may contain polycyclic aromatic hydrocarbons, which can be released when heated. This should be taken into account in measuring and assessing risks.

TWA (Fumes)  5 ppm 1 mg/m3  SK OEL (2011-11-23)
Further information  The limit applies to machine and hydraulic fluids and lubricants. Some oils may contain polycyclic aromatic hydrocarbons, which can be released when heated. This should be taken into account in measuring and assessing risks.

STEL (Fumes)  15 ppm 3 mg/m3  SK OEL (2011-11-23)
Further information  The limit applies to machine and hydraulic fluids and lubricants. Some oils may contain polycyclic aromatic hydrocarbons, which can be released when heated. This should be taken into account in measuring and assessing risks.

8.2 Exposure controls

Personal protective equipment
Eye protection : Safety glasses
Hand protection
Material : Solvent-resistant gloves
Material: Nitrile rubber
Glove thickness: >= 0.11 mm

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. 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 workplace.

Respiratory protection:
- Use suitable breathing protection if workplace concentration requires.

Filter type:
- Combined acidic, inorganic gas/vapour and organic vapour type (ABE)

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
Odour Threshold: No data available
pH: No data available
Freezing point: No data available
Boiling point/boiling range: No data available
Flash point: 215 °C

Evaporation rate: No data available

Flammability (solid, gas): Combustible Solids

Self-ignition: not auto-flammable

Auto-ignition temperature: No data available

Smoldering temperature: No data available

Decomposition temperature: No data available

Explosive properties: Not explosive

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

Density: 1.3 - 2.0 g/cm³

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
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
- 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
- Contact with water or humid air: This information is not available.
- Thermal decomposition: This information is not available.

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.

Further information

Product:
Remarks: 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
No data available

12.5 Results of PBT and vPvB assessment
Not relevant

12.6 Other adverse effects
产品:
附加生态信息: No data available

SECTION 13: Disposal considerations

欧洲废物目录：
- 12 01 04 - 非铁金属粉尘和颗粒
- 10 03 21 - 其他颗粒物和粉尘（包括磨球粉尘）含危险物质

13.1 Waste treatment methods
产品: In accordance with local and national regulations.

受污染包装: 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 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.
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

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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

15.2 Chemical safety assessment

This information is not available.

SECTION 16: Other information

Full text of H-statements

H228: Flammable solid.

Full text of other abbreviations

Flam. Sol.: Flammable solids
SK OEL: Slovakia. Chemical factors at work - Maximum acceptable exposure limits for chemical factors in the working environment
SK OEL / TWA: Long term exposure limit
SK OEL / STEL: Short term exposure limit

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 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
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.

SK / EN