1. PRODUCT AND COMPANY IDENTIFICATION

Product name: STAPA WM REFLEXAL 211/80 Aluminium Paste

Product code: 050667GD0

Chemical nature: Aluminium pigment paste

Manufacturer or supplier’s details

Company: 爱卡特殊效果颜料（珠海）有限公司

Address: 珠海市金湾区南水镇浪屿路3号

Telephone: +8607567228600

Emergency telephone number: National Emergency Response Hotline for Chemical Incident (China): 0532-83889090

E-mail address: Riko.Huang@altana.com

Telefax: +8607567228601

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: Pasty solid

Colour: silver

Odour: characteristic

Not a hazardous substance or mixture.

GHS Classification

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Physical and chemical hazards

Not classified based on available information.
SAFETY DATA SHEET according to GB/T 16483 and GB/T 17519

STAPA WM REFLEXAL 211/80 Aluminium Paste

Version 1.1
Revision Date: 2019/01/27
SDS Number: 102000031107
Print Date: 2019/02/04
Date of first issue: 2019/01/27

Health hazards
Not classified based on available information.

Environmental hazards
Not classified based on available information.

Other hazards which do not result in classification
Combustible Solids
None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture
Substance name :

Hazardous components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium powder</td>
<td>7429-90-5</td>
<td>&gt;= 50 -&lt;= 100</td>
</tr>
</tbody>
</table>

4. 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.

Most important symptoms and effects, both acute and delayed : None known.
SAFETY DATA SHEET
according to GB/T 16483 and GB/T 17519

STAPA WM REFLEXAL 211/80 Aluminium Paste

Version 1.1 Revision Date: 2019/01/27 SDS Number: 102000031107 Print Date: 2019/02/04 Date of first issue: 2019/01/27

5. FIREFIGHTING MEASURES

Suitable extinguishing media: Dry sand
Special powder against metal fire

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

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:
- Use personal protective equipment.
- Wear self-contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
- Evacuate personnel to safe areas.
- Use personal protective equipment.
- Remove all sources of ignition.
- Avoid dust formation.

Methods and materials for containment and 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.

7. HANDLING AND STORAGE

Handling
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.

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.

Avoidance of contact:
- Acids
- Bases
- Oxidizing agents
- Highly halogenated compounds

Storage
Conditions for safe storage:
- 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.

Technical measures/Precautions:
- Protect from humidity and water.
- Do not allow to dry.

Materials to avoid:
- 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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium powder</td>
<td>7429-90-5</td>
<td>PC-TWA (Total dust)</td>
<td>3 mg/m3 (Aluminium)</td>
<td>GBZ 2.1-2007</td>
</tr>
</tbody>
</table>

Personal protective equipment

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

Eye/face protection:
- Safety glasses

Skin and body protection:
- Long sleeved clothing
SAFETY DATA SHEET
according to GB/T 16483 and GB/T 17519

STAPA WM REFLEXAL 211/80 Aluminium Paste

Version: 1.1
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SDS Number: 102000031107
Print Date: 2019/02/04
Date of first issue: 2019/01/27

5 / 9

Safety shoes
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

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 break-through 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.

Hygiene measures: General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Pasty solid</td>
</tr>
<tr>
<td>Propellant</td>
<td>No data available</td>
</tr>
<tr>
<td>Colour</td>
<td>silver</td>
</tr>
<tr>
<td>Odour</td>
<td>characteristic</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Initial boiling point and boiling</td>
<td>No data available</td>
</tr>
<tr>
<td>range</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Combustible Solids</td>
</tr>
<tr>
<td>Flammability (liquids)</td>
<td>No data available</td>
</tr>
<tr>
<td>Burning rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-flammability</td>
<td>not auto-flammable</td>
</tr>
<tr>
<td>Burning number</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper explosion limit / Upper</td>
<td>No data available</td>
</tr>
<tr>
<td>flammability limit</td>
<td></td>
</tr>
<tr>
<td>Lower explosion limit / Lower</td>
<td>No data available</td>
</tr>
<tr>
<td>flammability limit</td>
<td></td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
</tbody>
</table>
density: 1.3 - 2.0 g/cm³

bulk density: No data available
solubility(ies): No data available
partition coefficient: n-octanol/water: No data available
auto-ignition temperature: No data available
decomposition temperature: No data available
self-accelerating decomposition temperature (SADT): No data available
temperature of polymerisation (SAPT): No data available
viscosity: No data available
viscosity, kinematic: No data available
flow time: No data available
solvent separation: No data available
explosive properties: Not explosive
oxidizing properties: No data available
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
minimum explosible dust concentration: No data available
dust deflagration index (Kst): No data available
dust explosion class: No data available
radioactivity: No data available
volatile organic compounds (VOC) content: No data available
volatile organic compounds (VOC) content: No data available
particle size: No data available
particle size distribution: No data available

10. STABILITY AND REACTIVITY

reactivity: No decomposition if stored and applied as directed.
chemical stability: No decomposition if stored and applied as directed.
possibility of 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.
conditions to avoid: Do not allow to dry.
not available
compatible materials: Acids, bases, oxidizing agents, highly halogenated compounds.
11. TOXICOLOGICAL INFORMATION

Acute toxicity
Not classified based on available information.

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

12. ECOLOGICAL INFORMATION

Ecotoxicity
No data available

Persistence and degradability
No data available

Bioaccumulative potential
No data available

Mobility in soil
No data available

Other adverse effects

Product:
Additional ecological information: No data available
13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues: 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.

14. TRANSPORT INFORMATION

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

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

IATA-DGR: Not classified as dangerous in the meaning of transport regulations.

IMDG-Code: Not classified as dangerous in the meaning of transport regulations.

Not dangerous goods in the meaning of ADR/RID, ADN, IMDG-Code, ICAO/IATA-DGR

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

National Regulations
Remarks: Not classified as dangerous good under GB 6944/12268

15. REGULATORY INFORMATION

National regulatory information
Law on the Prevention and Control of Occupational Diseases: Applicable

Regulations on Safety Management of Hazardous Chemicals
Catalogue of Hazardous Chemicals: Listed
## 16. OTHER INFORMATION

**Full text of other abbreviations**

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 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.

**Date format**

 yyyy/mm/dd

**GBZ 2.1-2007**

Occupational exposure limits for hazardous agents in the workplace - Chemical hazardous agents.

**GBZ 2.1-2007 / PC-TWA**

Permissible concentration - time weighted average.

**Disclaimer**

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CN / EN