

SAFETY DATA SHEET

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Section #1: PRODUCT AND COMPANY IDENTIFICATION

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Product Identification: Glycol Base Colloidal Silica Polishing Slurry Product Name: Colloidal Silica in Plastic Containers METS-COLL-SiO2-XXXX

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

2.2 Label elements

GHS Labeling

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

2.3 Other hazards

According to our experience and to the information provided to us, the product does not have any harmful effects if it is used and handled as specified.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Non-Hazardous Ingredients

| Component | CAS-No | Weight Percent | |
|---------------------------------|-------------|----------------|--|
| Silica, Amorphous, Precipitated | 112926-00-8 | 30 - 50 | |
| Water | 7732-18-5 | 30 - 50 | |

4. FIRST AID MEASURES

4.1 Description of first aid measures

| General advice | : Remove soiled/soaked clothing immediately. If you do not feel well, seek medical attention (show the label where possible). |
|----------------|--|
| Inhalation | : If inhaled, move person to fresh air. If they are having difficulty breathing, give oxygen (if available). Consult a doctor if symptoms continue or get worse. |

| Skin contact | : In case of contact with skin, wash off immediately with soap and plenty of water. Remove all clothing including shoes. Consult a doctor if you develop skin irritation. |
|--------------|--|
| Eye contact | : Rinse the affected eye immediately with plenty of water while keeping the unaffected eye well protected. Consult a doctor if you develop eye irritation. |
| Ingestion | : Seek medical attention. Make sure to show doctor the package and/or label. |

5. FIRE FIGHTING MEASURES

| 5.1 | Extinguishing media | |
|-----|---------------------------------------|---|
| | Suitable extinguishing media | : Water spray jet; foam; dry powder; carbon dioxide; product itself is non-combustible; fire extinguishing method of surrounding areas must be discussed. |
| 5.2 | Special hazards arising from th | e substance or mixture |
| | Specific hazards during fire fighting | : None known |
| 5.3 | Advice for fire-fighters | |
| | Protective equipment | : Closed - full protective clothing (coat and pants) including helmet. Use self-contained breathing apparatus. |
| | Further information | : Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations. |

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Refer to Section 8: Exposure Controls/Personal Protection.

6.2 Environmental precautions

Environmental precautions : Do not allow entry to drains, waterways, or soil.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Pick up with liquid binding materials and if necessary fill in containers capable of being locked. Containers in which split substance has been collected must be adequately labeled. Dispose of absorbed material in accordance with the regulations. Clean contaminated floors and objects thoroughly, observing environmental regulations.

6.4 Reference to other sections

| Additional advice | : Information regarding safe handling, see Section 7. |
|-------------------|--|
| | Information regarding personal protective measures, see Section 8. |
| | Information regarding waste disposal, see Section 13. |

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

| Advice on safe handling | : Provide good ventilation of working area (local exhaust ventilation if necessary). Wear respiratory protection when spraying. |
|---|--|
| Advice on protection against fire and explosion | : Observe the general rules of industrial fire protection. |

7.2 Conditions for safe storage, including any incompatibilities

| Requirements for storage areas and containers | : Keep only in unopened original container. Use polyolefin containers. Do not use steel containers. |
|---|--|
| Further information on storage conditions | : Keep container tightly closed and dry in a cool, well-ventilated place. Protect against frost. The product after freezing is no longer usable. |
| Advice on common storage | : Do not store or transport together with food stuffs. |
| 7.3 Specific end uses | : Determined by user |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure Guidelines

Components with workplace control parameters

| Components | CAS-No | Control Parameters | Basis |
|---------------------------------|-------------|-----------------------------------|-------|
| Silica, Amorphous, Precipitated | 112926-00-8 | TWA: 10 mg/m ³ | ACGIH |
| | | TWA: 6 mg/m ³ | OSHA |
| | | TWA: 6 mg/m ³ 8 hours | OSHA |
| | | TWA: 6 mg/m ³ 10 hours | NIOSH |

8.2 Exposure controls

Engineering measures

Provide good ventilation of working area (local exhaust ventilation if necessary).

Personal protective equipment

| Respiratory protection | : Use respiratory protection in case of insufficient exhaust |
|--------------------------|---|
| Hand protection | : Break through time: >10 min. Glove thickness: > 0,4 mm For short-term exposure (splash protection): Nitrile rubber gloves Remarks: These types of protective gloves are offered by various manufacturers. Please note the manufacturers' detailed statements, especially about the minimum thickness and the minimum breakthrough time. Consider also the particular working conditions under which the gloves are being used. |
| Eye protection | : Tightly fitting safety glasses |
| Skin and body protection | : Protective clothing |
| Hygiene measures | : When using do not eat, drink or smoke. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Use barrier skin cream. |
| Protective measures | : Avoid contact with eyes and skin. Observe the usual precautions for handling chemicals. |

Environmental exposure controls

General advice

: Do not allow entry to drains, water courses or soil.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| Appearance Form Color Odor | : Liquid : Blue : Odorless |
|--|---|
| Safety data Upper/lower flammability Vapor pressure Vapor density pH Relative density Freezing point Solubility(ies) Boiling point/Boiling range Flash point Evaporation rate Flammability (solid, gas) Partition coefficient: n-octanol/water Auto-ignition temperature Decomposition temperature Viscosity | Not determined Not determined app. 10 - 10.5 at 68 °F (20 °C) Not determined app. 32 °F (0 °C) Miscible in all proportions approx. 212 °F (100 °C) Water-based material containing no combustible components. Compatible with extinguishing agents. Not determined N/A - liquid Not determined N/A - non-flammable liquid Not determined Iow, <50 cps |

9.2 Other information

No further relevant information available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions

: No dangerous reaction known under conditions of normal use.

| 10.4 Conditions to avoid | |
|-------------------------------------|--|
| Conditions to avoid | : Protect from freezing or frost. |
| 10.5 Incompatible materials | |
| Materials to avoid | : No further relevant information available. |
| 10.6 Hazardous decomposition pro | oducts |
| Hazardous decomposition products | : No decomposition if stored and applied as directed. |
| 11. TOXICOLOGICAL INFORMATI | ON |
| 11.1 Information on toxicological e | iffects |
| Data for Silica, Amorphous, P | recipitated (112926-00-8) |
| Acute oral toxicity | : LDLo > 3,300 mg/kg (rat) |
| Acute inhalation toxicity | : LC50 / 4h > 2 mg/l (rat) |
| Acute dermal toxicity | : LD50 > 5,000 mg/kg (rat) |
| Skin irritation | : Prolonged and/or repeated skin contact may cause irritation. |
| Eye irritation | : Short time, reversible irritation |
| 12. ECOLOGICAL INFORMATION | |
| 12.1 Toxicity | |
| Aquatic toxicity | : No further relevant information available. |
| 12.2 Persistence and degradability | , |
| Biodegradability | : Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Biodegradation may occur under anaerobic conditions (in the absence of oxygen). |
| 12.3 Bioaccumulative potential | : No further relevant information available. |
| 12.4 Mobility in soil | : No further relevant information available. |
| 12.5 Results of PBT and vPvB asse | essment |
| | tain any substances that are assessed to be a PBT or a vPvB. ntain any substances that are assessed to be a PBT or a vPvB. |
| 12.6 Other adverse effects | |
| No further relevant information a | available. |
| Additional ecological information | : No further relevant information available. |
| 13. DISPOSAL CONSIDERATIONS | 3 |
| 13.1 Waste treatment methods | |
| Additional information | : Neutralize Product should be taken to a suitable and authorized waste disposal site in accordance with relevant regulations and if necessary after consultation with the waste disposal operator and/or the competent authorities. |
| | |

| DOT | : Not dangerous goods | |
|------|-----------------------|--|
| ΙΑΤΑ | : Not dangerous goods | |
| IMDG | : Not dangerous goods | |
| TDG | : Not dangerous goods | |
| | | |

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

United States

: The substances in this preparation are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710)

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for the substance(s) that makes/make up this material or for the material itself.

16. OTHER INFORMATION

Decimal notation: "Thousands" places are identified with a dot (example: 2.000 mg/kg means "two thousand mg/kg"). Decimal places are identified with a comma (example: 1,35 g/cm3)

Further information

Further information

: Observe national and local legal requirements

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