



AR-Powder

SECTION 1. IDENTIFICATION

| | |
|---|---|
| Product Identifier | AR-Powder |
| Other Means of Identification | Peroxide Catalyzed Silica Blend |
| Product Family | Silicon dioxide, with peroxide catalyst |
| Recommended Use | Mixed with another component to form a corrosion-resistant mortar. |
| Restrictions on Use | None known. |
| Manufacturer/Supplier Identifier | The Stebbins Engineering and Manufacturing Company, 363 Eastern Boulevard, Watertown, NY, 13601, (315) 782-3000, www.stebbinseng.com |
| Emergency Phone No. | Chemtrec - Within North America, 1-800-424-9300, 24 hours Stebbins 24 Hour Contact-, 1-315-788-6624 |
| SDS No. | 004 |

SECTION 2. HAZARD IDENTIFICATION

Classification

Skin irritation - Category 3; Eye irritation - Category 2A; Carcinogenicity - Category 1; Specific target organ toxicity (single exposure) - Category 3; Specific target organ toxicity (repeated exposure) - Category 1

Label Elements



Signal Word:
Danger

Hazard Statement(s):

| | |
|------|--|
| H316 | Causes mild skin irritation. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| H350 | May cause cancer if inhaled. |
| H372 | Causes damage to organs (lungs) through prolonged or repeated exposure if inhaled. |

Precautionary Statement(s):

| | |
|-------------|--|
| P202 | Do not handle until all safety precautions have been read and understood. |
| P260 | Do not breathe dust. |
| P264 | Wash hands thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P304 + P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |

Product Identifier: AR-Powder - Ver. 8
Date of Preparation: September 08, 2015
Date of Last Revision: June 30, 2023

SDS No.: 004

Page 01 of 06

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P314 Get medical advice/attention if you feel unwell.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P501 Dispose of contents and container in accordance with local, regional, national and international regulations.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | % | Other Identifiers | Other Names |
|------------------|------------|-----------|--|------------------|
| Silica, quartz | 14808-60-7 | 90 - 95 % | SiO ₂ | Silicon dioxide |
| Titanium dioxide | 13463-67-7 | 5 - 10% | TiO ₂ | Pigment, white |
| Benzoyl peroxide | 94-36-0 | 0.1 - 1 % | C ₁₄ H ₁₀ O ₄ | Organic peroxide |

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Move to fresh air. Get medical advice or attention if you feel unwell or are concerned.

Skin Contact

Clean clothing, shoes and leather goods. Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes. If skin irritation occurs, get medical advice or attention.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open.

Ingestion

Rinse mouth with water. Get medical advice or attention if you feel unwell or are concerned.

Most Important Symptoms and Effects, Acute and Delayed

If inhaled: can cause lung injury.

Immediate Medical Attention and Special Treatment

Target Organs

Lungs.

Medical Conditions Aggravated by Exposure

Respiratory conditions.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Not combustible. Use extinguishing agent suitable for surrounding fire.

Specific Hazards Arising from the Product

Can ignite if strongly heated.

In a fire, the following hazardous materials may be generated: irritating chemicals; toxic chemicals.

Special Protective Equipment and Precautions for Fire-fighters

Before entry, especially into confined areas, use an appropriate monitor to check for: toxic gases or vapours. Approach fire from upwind to avoid hazardous vapours or gases.

Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet.

Environmental Precautions

It is good practice to prevent releases into the environment.

Methods and Materials for Containment and Cleaning Up

Avoid generating dust. Avoid dry sweeping. If necessary, use a dust suppressant such as water. Do not use compressed air for clean-up. Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Do not breathe in this product. Do not get in eyes, on skin or on clothing.

Conditions for Safe Storage

Store in an area that is: cool, dry.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

The control parameters for silica are as follows:

OSHA: the action level for respirable silica is 25 µg/m³ (8 hour TWA). Below this level, no special action need be taken. Above it, 1926.1153 applies in full.

OSHA PEL: 50 µg/m³ (8 hour TWA).

ACGIH TLV: TWA: 0.025 mg/m³ respirable mass

NIOSH PEL: TWA: 80 mg/m³ / (%SiO₂) (amorphous)[2]

NIOSH REL: TWA: 6 mg/m³ (amorphous)[2]

CAL REL: TWA: 0.05 mg/m³

ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value. TWA = Time-Weighted Average. OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits. NIOSH = National Institute for Occupational Safety and Health. REL = Recommended Exposure Limit.

Appropriate Engineering Controls

Use local exhaust ventilation and enclosure, if necessary, to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear approved safety glasses.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

Respiratory Protection

Wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

| | |
|-------------------------------------|--|
| Appearance | White powder. Particle Size: Fine |
| Odour | Odourless |
| Odour Threshold | Not available |
| pH | 6 - 8 |
| Melting Point/Freezing Point | 2930 °F (1610 °C) (Silica, quartz) (melting) |
| Boiling point/Initial boiling point | 4046 °F (2230 °C) |
| Boiling Range | Not available |

Product Identifier: AR-Powder - Ver. 8
Date of Preparation: September 08, 2015
Date of Last Revision: June 30, 2023

SDS No.: 004

Page 03 of 06

| | |
|---|--|
| Flash Point | Not applicable |
| Evaporation Rate | Not applicable |
| Flammability (solid, gas) | Not applicable |
| Upper/Lower Flammability or Explosive Limit | Not applicable (upper); Not applicable (lower) |
| Vapour Pressure | Not applicable |
| Vapour Density (air = 1) | Not applicable |
| Relative Density (water = 1) | ~ 2.65 at 25 °C |
| Solubility | Insoluble in water |
| Partition Coefficient, n-Octanol/Water (Log Kow) | Not available |
| Auto-ignition Temperature | Not applicable |
| Decomposition Temperature | Not applicable |
| Viscosity | Not applicable (kinematic); Not applicable (dynamic) |
| Other Information | |
| Physical State | Solid |
| Bulk Density | 165.43 lb/ft3 (2649.94 kg/m3) |

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions of use.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

Conditions to Avoid

Open flames, sparks, static discharge, heat and other ignition sources.

Incompatible Materials

None known.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Inhalation; eye contact.

Acute Toxicity

LD50 (Oral)

LD50 = 22,500 mg/kg rat

Skin Corrosion/Irritation

Human experience shows very mild irritation.

Serious Eye Damage/Irritation

Human experience shows mild irritation.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

Causes nose and throat irritation.

Ingestion

No information was located.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

Product Identifier: AR-Powder - Ver. 8
Date of Preparation: September 08, 2015
Date of Last Revision: June 30, 2023

SDS No.: 004

Page 04 of 06

Causes lung injury.

Respiratory and/or Skin Sensitization

Not known to be a respiratory sensitizer.

Carcinogenicity

Has been associated with: lung cancer. IARC: Group 1 – Carcinogenic to humans. ACGIH®: A2 – Suspected human carcinogen. NTP: Known human carcinogen. (Silica, quartz)

Reproductive Toxicity

Development of Offspring

Not known to harm the unborn child.

Sexual Function and Fertility

Not known to cause effects on sexual function or fertility.

Effects on or via Lactation

Not known to cause effects on or via lactation.

Germ Cell Mutagenicity

Not known to be a mutagen.

SECTION 12. ECOLOGICAL INFORMATION

Not hazardous to the environment.

Ecotoxicity

(Silica, quartz) is not known to be ecotoxic. aquatic environment. LC50 carp > 10,000 mg/L 72 hours.

Persistence and Degradability

(Silica, quartz) is not degradable.

Bioaccumulative Potential

This product and its degradation products are not expected to bioaccumulate.

Mobility in Soil

If released into the environment, this product does not move through the soil.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction.

SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations. Not regulated under IATA Regulations.

| Regulation | UN No. | Proper Shipping Name | Transport Hazard Class(es) | Packing Group |
|--------------|--------|----------------------|----------------------------|---------------|
| US DOT | | Non-Regulated | | |
| IMO (Marine) | | Non-Regulated | | |
| IATA (Air) | | Non-Regulated | | |
| Canadian TDG | | Non-Regulated | | |

Special Precautions Not applicable

Transport in Bulk according to International Maritime Organization Instruments

Not applicable

SECTION 15. REGULATORY INFORMATION

Product Identifier: AR-Powder - Ver. 8
Date of Preparation: September 08, 2015
Date of Last Revision: June 30, 2023

SDS No.: 004

Page 05 of 06

Safety, Health and Environmental Regulations

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by the Controlled Products Regulations.

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL or are not required to be listed.

CEPA - National Pollutant Release Inventory (NPRI)

Part 1A. (Benzoyl peroxide)

USA

Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.

SECTION 16. OTHER INFORMATION

| | | | |
|-----------------------|--|------------------|-----------------|
| NFPA Rating | Health - 2 | Flammability - 0 | Instability - 0 |
| | Based on | Silica, quartz | |
| SDS Prepared By | B.E.R. | | |
| Phone No. | (315) 782-3000 | | |
| Date of Preparation | September 08, 2015 | | |
| Date of Last Revision | June 30, 2023 | | |
| Revision Indicators | Revision 8 reviewed and approved | | |
| Key to Abbreviations | ACGIH® = American Conference of Governmental Industrial Hygienists HSDB® = Hazardous Substances Data Bank IARC = International Agency for Research on Cancer NFPA = National Fire Protection Association NIOSH = National Institute for Occupational Safety and Health NTP = National Toxicology Program OSHA = US Occupational Safety and Health Administration RTECS® = Registry of Toxic Effects of Chemical Substances | | |
| References | CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS). NIOSH Pocket Guide database. National Institute for Occupational Safety and Health. Available from Canadian Centre for Occupational Health and Safety (CCOHS). Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault Systèmes/BIOVIA ("BIOVIA"). Available from Canadian Centre for Occupational Health and Safety (CCOHS). | | |
| Disclaimer | NOTE: The information contained herein is, to the best of our knowledge, accurate and reliable. However, no warranty is expressed or implied regarding the accuracy of this information, or the results to be obtained from the use thereof. | | |

Product Identifier: AR-Powder - Ver. 8
Date of Preparation: September 08, 2015
Date of Last Revision: June 30, 2023

SDS No.: 004

Page 06 of 06