Safety Data Sheet

RCC Corrosion Control / SDS #: RCC-24011 / Revision Date: 05/23/2022

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: AR-1 FILLER

Chemical Family: Silica & Aluminum Oxide Mixture

Product Use: Filler / Reinforcing Agent for Polymer Coating

Restrictions on Use: Use as directed by manufacturer

Manufacturer: RCC Corrosion Control
1450 Hoff Industrial Drive
O'Fallon, MO 63366
Phone: 636-697-4659

24-Hour Emergency Phone Number: North America: 800-424-9300 (CHEMTREC)
International: 703-527-3887 (CHEMTREC) Collect Calls Accepted

2. HAZARD IDENTIFICATION

GHS Classifications

Health Hazards
Eye Irritation, Category 2B
Carcinogenicity, Category 1B
Specific Target Organ Systemic Toxicity, Repeated Exposure, Category 1, Respiratory Tract, Lungs [Inhalation, Ingestion]

GHS-Labeling
Pictograms:

Signal Word: Danger!

Hazard Statements
H320: Causes eye irritation
H350: May cause lung cancer
H372: Causes damage to organs through prolonged or repeated exposure
Precautionary Statements

Prevention:
P201: Obtain special instructions before use.
P260 Do not breathe dust
P264: Wash skin and exposed areas thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P281: Use personal protective equipment as required.

Response:
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313: If eye irritation persists: Get medical advice/attention.

Storage:
P404: Store in a closed container

Disposal:
P501: Dispose of contents/container in accordance with local, regional, and federal regulations

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical characterization

Component*	CAS #	% By Wt.
Crystalline Silica, quartz	14808-60-7	30 – 80
Aluminum Silicate, anhydrous	92704-41-1	10 – 15
Titanium Dioxide	13463-67-7	< 1

4. FIRST AID MEASURES

Inhalation
Symptoms & Effects: Irritation of the nose and airways, Silicosis or scarring of the lungs with prolonged and repeated exposure, shortness of breath
Measures: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing has stopped, begin artificial respiration. If breathing is difficult, administer oxygen. If symptoms persist, seek medical attention.

Skin Contact
Symptoms & Effects: Slight skin irritation
Measures: Wash skin and exposed area with soap and water before breaks and at the end of the shift. If skin irritation develops, seek medical attention.

Eye Contact
Symptoms & Effects: Slight eye irritation

Measures: Rinse eyes with water for several minutes. Remove contact lenses after the initial few minutes and if easy to do so and resume rinsing. If eye irritation persists, seek medical attention.

Ingestion
Symptoms & Effects: Slight irritation
Measures: Do not induce vomiting. If the victim is drowsy or unconscious, do not give anything by mouth. If conscious, drink plenty of water. If irritation persists, seek medical attention.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: All accepted extinguishing media is suitable

Unsuitable Extinguishing Media: None identified

Hazardous Combustion Products: None identified

Protective Equipment for Fire-Fighters: Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

Precautions for Fire-Fighters: This product is not expected to burn. Use any extinguishing media that is appropriate for the surrounding fire.

6. ACCIDENTAL RELEASE MEASURES

Protective Equipment: Wear appropriate protective eyeglasses or chemical safety goggles when particles could cause injury to the eyes.

Personal Precautions: Persons not wearing proper PPE should be excluded from the area of contamination until clean-up has been completed. Ensure adequate ventilation.

Environmental Precautions: Do not allow discharge into drains, surface waters, or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained or if material discharges into drains or ground water.

Methods & Materials for Clean-Up: Collect material using a dustless method such as a HEPA vacuum or by water spraying/flushing. Avoid using compressed air or dry sweeping. Transfer to a suitable container for disposal according to proper federal, state, and local regulations.

7. HANDLING AND STORAGE

Handling: Avoid generating dust. Do not breathe dust. Do not rely on sight alone to determine if dust is in the air as respirable crystalline silica dust may be in the air without a visible dust cloud. Use adequate exhaust ventilation and dust collection. Maintain and test ventilation and dust collection equipment. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or other equipment.

Wear a respirator if exposure limits are above the OSHA Permissible Exposure Limit (PEL) as well as when maintenance must be performed on ventilation and dust collection equipment. Wash clothing that has become dusty.

Storage: Keep containers closed and store bags to avoid accidental tearing, breaking, or bursting.

Incompatible Materials: Strong oxidizing agents, Fluorine, Chlorine trifluoride, Oxygen difluoride, Manganese trioxide, Hydrofluoric acid

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits :

Exposure limits have not been established for this product.

Crystalline Silica, quartz		**CAS # 14808-60-7**	
	OSHA	Permissible Exposure Limit (PEL)	0.05 mg/m^3
	ACGIH	Threshold Limiting Value (TLV)	0.025 mg/m^3
	NIOSH	Recommended Exposure Limit (REL)	0.05 mg/m^3
Aluminum Silicate, anhydrous		**CAS # 92704-41-1**	
	OSHA	Permissible Exposure Limit (PEL)	5 mg/m^3
	ACGIH	Threshold Limiting Value (TLV)	1 mg/m^3
	NIOSH	Recommended Exposure Limit (REL)	5 mg/m^3
Titanium Dioxide		**CAS # 13463-67-7**	
	OSHA	Permissible Exposure Limit (PEL)	15 mg/m^3
	ACGIH	Time weighted average (TWA)	10 mg/m^3

Engineering Controls: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposures below permissible exposure limits. Provide readily accessible eye wash stations and safety showers.

Occupational Exposure Controls: Ensure adequate ventilation, especially in confined areas. Consider all potential hazards of this material, applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting PPE. Ensure that eyewash stations and safety showers are proximal to the work location. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Protective and Hygiene measures: Do not inhale dust. Wash hands before breaks and immediately after handling product. When using, do not eat, drink, or smoke. Launder clothing before reuse.

Eye Protection: Recommended to wear tight fitting, eye goggles when handling product. Have a suitable eye wash station or bottle nearby in case of eye irritation.

Hand Protection: Gloves may be worn to reduce skin exposure to product. If gloves are not used, wash hands before breaks and immediately after handling product. Gloves are recommended for workers who have sensitive skin or dermatitis.

Skin Protection: Good personal hygiene practices should be followed including cleansing of exposed skin with soap and water, and laundering work clothing that has become dusty.

Respiratory Protection: A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Grey Powder
Odor: Odorless
Odor Threshold: Not applicable
pH: No data available
Melting/freezing point: 3,090°F (1,700°C)
Boiling point: 4,020°F (2,200°C)
Boiling range: No data available
Flash point (Tag closed cup): No data available
Evaporation rate: No data available
Flammability: Lower Limit: No data available **Upper Limit:** No data available
Vapor pressure: No data available
Relative vapor density: No data available
Density: 2.6 g/cm^3 (22 lbs/gal) @ 68°F (20°C)
Solubility in water: Insoluble
Partition coefficient (n-octanol/water): No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity (dynamic): No data available

10. STABILITY AND REACTIVITY

Reactivity: No decomposition if stored and applied as directed. Reacts with strong oxidizing agents.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Will not occur if isolated from strong oxidizing agents and incompatible materials listed below.

Conditions to Avoid: Incompatible materials

Incompatible Materials: Strong oxidizing agents, Fluorine, Chlorine trifluoride, Oxygen difluoride, Manganese trioxide, Hydrofluoric acid

Hazardous decomposition products: Silicon tetrafluoride (if mixed with hydrofluoric acid)

11. TOXICOLOGICAL INFORMATION

Primary Route of Exposure: Inhalation

Symptoms Related to Physical, Chemical and Toxicological Characteristics: Irritation of the nose and airways, slight skin irritation, slight eye irritation, shortness of breath

Delayed and Immediate Effects & Chronic Effects from Exposure: With repeated exposure, the substance may have effects on the respiratory system and lungs, including the development of Silicosis or scarring of the lungs. This substance is a potential carcinogen to humans as outlined by OSHA, IARC, ACGIH and the NTP (see below).

Measures of Toxicity:
Acute toxicities are calculated based on component toxicities
Mixture: Acute Oral Toxicity: LD_{50} Rat: > 20,000 mg/kg
Acute Dermal Toxicity: LD_{50} Rat: No sufficient data available
Acute Inhalation Toxicity: LC_{50} Rat: No sufficient data available

Crystalline Silica, quartz	**CAS # 14808-60-7**
Acute Oral Toxicity	LD_{50} Rat: 22,500 mg/kg

Titanium Dioxide	**CAS # 13463-67-7**
Acute Oral Toxicity	LD_{50} Rat: > 5,000 mg/kg
Acute Inhalation Toxicity	LC_{50} Rat: > 6.8 mg/l

Carcinogen Claims: (Quartz, titanium dioxide)
OSHA: **Yes; 1B,** International Agency for Research on Cancer (IARC): **Yes; 1 [Carcinogenic to Humans]**
ACGIH: **Yes; A2 [Suspected Human Carcinogen],** National Toxicology Program (NTP) Report on Carcinogens: **Yes; I [Known Carcinogen]**

12. ECOLOGICAL INFORMATION

Eco-toxicity: This substance is not suspected of being toxic to aquatic organisms, however it is still strongly advised that this substance does not enter the environment.

Crystalline Silica, quartz **CAS # 14808-60-7**
Toxicity to Fish LC_{50} > 10,000 mg/l (Carp; 72 h)

Persistence & Degradability: No data available
Bio-accumulative Potential: No data available
Mobility in Soil: No data available
Other Adverse Effects: No data available

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with Federal, State or Local regulations.
Contaminated packaging should be emptied as far as possible before disposal.

14. TRANSPORT INFORMATION

DOT SHIPPING CLASSIFICATION:
This product is not regulated as a hazardous material for transport.

IMDG (Marine) SHIPPING CLASSIFICATION:
This product is not regulated as a dangerous good for transport.

IATA (Air) SHIPPING CLASSIFICATION:
This product is not regulated as a dangerous good for transport.

15. REGULATORY INFORMATION

All components of this product conform to the following national inventory requirements. US TSCA, EU EINECS and Canada DSL

SARA Title III

Section 302 – Extremely Hazardous Chemicals
The following ingredients are subject to the supplier notification requirements of Section 302 of the Superfund Amendments and Reauthorization Act (SARA/EPCRA) and the requirements of 40 CFR Part 37
None Listed

Section 313 – Toxic Chemicals
The following ingredients are subject to the supplier notification requirements of Section 313 of the Superfund Amendments and Reauthorization Act (SARA/EPCRA) and the requirements of 40 CFR Part 37 *None Listed*

OTHER FEDERAL REGULATIONS

Components of this product are subject to RCRA Hazardous Waste requirements.
Clean Air Act (CAA) Hazardous Air Pollutants requirements and OSHA Process Safety Management (PSM) high hazard requirements.

CANADIAN REGULATIONS

Same as OSHA GHS Classification

STATE REGULATIONS

California Proposition 65 (Quartz)
WARNING: This product contains chemicals known to the state of California to cause cancer.

California Hazardous Substances List/Permissible Exposure List
California Toxic air contaminants
Connecticut Permissible Exposure Limits
Delaware List of Chemicals and RQs
Hawaii Permissible Exposure Limits
Idaho Toxic Air Pollutants
Illinois Toxic Air Contaminants List
Louisiana Toxic Air Pollutants
Maine Hazardous Air Pollutants
Maryland Toxic Air Pollutants for Existing Sources
Massachusetts Hazardous Substances List
Michigan Permissible Exposure Limits
Minnesota Hazardous Substances
Minnesota Permissible Exposure Limits
Nebraska Hazardous Air Pollutants
New Jersey RTK Hazardous Substances List/TCPA Extremely Hazardous Substances List
New York List of Hazardous Substances
Ohio Toxic Air Contaminants
Oklahoma Toxic Air Contaminants
North Carolina TAP Emissions Rates Requiring a Permit
Pennsylvania Hazardous Substances List
Rhode Island Toxic Air Contaminants
Tennessee Permissible Exposure Limits
Vermont Hazardous Air Contaminants/Permissible Exposure Limits
Washington Permissible Exposure Limits for Airborne Contaminants.
West Virginia Toxic Air Pollutant List
Wisconsin hazardous Air Contaminants

Note: Entries under Section 15 are not intended to be all inclusive of Federal and State laws and regulations. Please consult the appropriate agencies for further clarification of any requirements.

16. OTHER INFORMATION

Disclaimer: The information provided in this Material 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.