Penetron ARC - Part A (Powder)

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

Date of issue: 11/02/2018 Revision date: 08/05/2024 Version: O08/P

SECTION 1: Identification

1.1. Product identifier

Product name : Penetron ARC - Part A (Powder)

Product code : Not available.

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Acid Resistant Coating

1.3. Details of the supplier of the safety data sheet

Penetron International, Ltd.
601 S. 10th Street, Unit 300
Allentown, PA 18103 - USA
T +1 (631) 941-9700
info@penetron.com – www.penetron.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: US and Canada: 1-800-424-9300; International +1 703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Corrosion/Irritation, 1
Serious Eye Damage/Eye Irritation, 1
Skin Sensitization, 1
Carcinogen/Inhalation, 1A
Specific Target Organ Toxicity (Single Exposure), 3
Specific Target Organ Toxicity (Repeated Exposure), 1

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :

GHS05 GHS07 GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation. May cause cancer by inhalation. Causes damage to lungs through prolonged or repeated exposure by inhalation.

Precautionary statements (GHS-US)

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust. Use outdoors in a well-ventilated area. Wash any exposed body parts thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated clothing must not be allowed out of the workplace.

Response : IF exposed or concerned: Immediately get medical advice/attention if you feel unwell or irritation or rash occurs. IF on skin: Wash with plenty of water. Take off contaminated clothing and wash before reuse. IF in eyes: Rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do. IF inhaled: Remove person to fresh air and keep comfortable for breathing. IF swallowed: Rinse mouth. Do NOT induce vomiting.

Storage : Store locked up. Store in a well-ventilated area. Keep container tightly closed.

Disposal : Dispose of contents/container in accordance with local/state/national regulations.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable.

3.2. Mixture

Name	Product identifier	%
Slags	65996-69-2	45 - 55
Crystalline Silica (Quartz)	14808-60-7	45 - 65

* The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

SECTION 4: First aid measures

4.1. Description of first-aid measures

First-aid measures after inhalation : Remove person to fresh air away from dust and keep comfortable for breathing. If coughing persists, obtain medical attention.

First-aid measures after skin contact : Remove contaminated clothing. Wash with thoroughly with lukewarm gentle flowing water and non-abrasive pH natural soap. If skin irritation occurs, get immediate medical advice/attention.

First-aid measures after eye contact : Rinse eyes and under lids cautiously with clean water for at least 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

First-aid measures after ingestion : Get immediate medical advice/attention. Remove person to fresh air and keep comfortable for breathing. If subject is conscious, rinse the mouth with water to remove any material and drink plenty of water to dilute any swallowed material. Do NOT induce vomiting. Do not give drink or attempt to force water to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause mucous membrane or respiratory irritation, cough, sore throat, nasal congestion, sneezing or shortness of breath.

Symptoms/injuries after skin contact : Causes severe burns. May cause allergic skin reaction.

Symptoms/injuries after eye contact : Causes serious eye irritation damage.

Symptoms/injuries after ingestion : May cause irritation and burns of mouth, throat, stomach and digestive tract if swallowed.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Contact poison control or seek immediate medical attention for ingestion/inhalation of large quantities of dust or exposure of wet material over large areas of skin.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : Do not use water jet or water-based fire extinguishers.

5.2. Special hazards arising from the substance or mixture

Fire hazard : None.

Hazardous thermal decomposition : Decomposition products may include the following materials: carbon dioxide, carbon monoxide, sulfur oxides and metal oxide/oxides.

5.3. Advice for firefighters

Protection during firefighting : Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid creating dust. Prevent material from entering sewers, drains, ditches or waterways. Wear respiratory protection and protective eyewear/clothing to avoid eye or skin contact.

6.2. Methods and material for containment and cleaning up

Methods for containment : Prevent further leakage or spillage if safe to do so.

Methods for cleaning up : Ventilate area and avoid creating dust. Remove unnecessary persons from area. Do not dry sweep. Scoop or vacuum up spilled material while avoiding dust creation. Scoop up wet material and place in approved container. Allow wet material to harden before disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin or eyes. Avoid breathing dust. Use only in well ventilated areas.

Hygiene measures : Wear appropriate personal protective equipment to prevent eye or skin contact and use respiratory protection equipment if dusty or in poorly ventilated areas. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in well-ventilated areas away from moisture and incompatible materials. If stored in containers, keep containers closed when not in use.

Incompatible materials : Water/moisture exposure will cause material to generate heat. Keep away from aluminium metal, strong acids and oxidizers. May release hydrogen sulfide gas when wet or heated. Can react with water to form calcium hydroxide.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits

Slags (65996-69-2)		
ACGIH	ACGIH TWA (mg/m³)	3 mg/m³ 8 hours (respirable fraction) 10 mg/m³ 10 hours (total)
OSHA	OSHA PEL (TWA) (mg/m³)	5 mg/m³ 8 hours (respirable fraction) 15 mg/m³ 8 hours (total dust)

Crystalline Silica (Quartz) (14808-60-7)		
ACGIH	ACGIH TWA (mg/m³)	0.025 mg/m³ (respirable fraction)
OSHA	OSHA PEL (TWA) (mg/m³)	0.05 mg/m³ (vacated)
NIOSH	NIOSH REL (mg/m³)	0.05 mg/m³ (respirable dust)

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits NIOSH IDLH Immediately Dangerous to Life or Health

8.2. Exposure controls

Appropriate engineering controls : Use outdoors in well-ventilated areas; otherwise employ natural or mechanical ventilation to maintain exposure within applicable limits.

Hand protection : Protective gloves with wrist/arm cuffs should be worn to avoid direct contact with skin.

Eye protection : Safety glasses with side shields or protective goggles should be worn while using this product. For extremely dusty conditions, non-vented goggles or goggles with indirect venting are recommended. Avoid contact lens wear when using this product.

Skin and body protection : Long sleeved shirts and trousers should be worn while using this material. Wear water-proof boots. If working in dusty conditions, impervious over garments are recommended.

Respiratory protection : If exposure levels cannot be maintained below acceptable limits, suitable particulate-filtering facemasks or respirators approved by MSHA/NIOSH should be worn in accordance with the user's respiratory protection program and OSHA/MSHA guidelines.

Environmental exposure controls : Avoid contact with skin or eyes. Avoid creating or breathing dust.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Powder

Color : Off-white, tan

Odor : Odorless

Odor threshold : No data available

pH : 8-10

Melting point : No data available

Freezing point : Solid at room temperature

Boiling point : No data available

Flash point : Not flammable

Relative evaporation rate (butyl acetate=1) : No data available

Flammability (solid, gas) : No data available

Explosion limits : No data available

Explosive properties : No data available

Oxidizing properties : No data available

Vapor pressure : No data available

Specific gravity : 2.65

Relative vapor density at 20°C : No data available

Solubility : Slightly soluble in water

Partition coefficient: n-octanol/water : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

SECTION 10: Stability and reactivity

10.1. Reactivity
Reacts slowly with water forming silicates and calcium hydroxide.

10.2. Chemical stability
Stable under normal storage conditions.

10.3. Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid
Wet/damp or moist.

10.5. Incompatible materials
Reactive or incompatible with the following materials: oxidizing materials, acids, aluminum and ammonium salt. Toxic gases or vapors may be given off depending on the acid involved. Reacts with acids, aluminum metals and ammonium salts. Aluminum powder and other alkali and alkaline earth elements will react in wet mortar or concrete, liberating hydrogen gas. Silica reacts violently with powerful oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride yielding possible fire and/or explosions.

10.6. Hazardous decomposition products
Silica will dissolve in hydrofluoric acid producing a corrosive gas, silicon tetrafluoride.

SECTION 11: Toxicological information

11.1. Information on likely routes of exposure
Inhalation : May cause respiratory irritation.
Eye contact : Causes serious eye damage.
Skin contact : Causes irritation or chemical burns if exposed to moisture on skin. May cause an allergic skin reaction.
Ingestion : Irritation and chemical burns of mouth, throat and stomach.

11.2. Information on toxicological effects
Acute toxicity

Crystalline Silica (Quartz) (14808-60-7)	
LD50 oral rat	>22,500 mg/kg
LD50 dermal rabbit	Not available
LC50 inhalation rat	Not available

11.3. Delayed and immediate effects as well as chronic effects from short and long-term exposure
Skin corrosion/irritation : May cause skin irritation. May cause serious burns in the presence of moisture.
Serious eye damage/ irritation : Causes serious eye damage. May cause burns in the presence of moisture.
Respiratory or skin sensitization : May cause sensitization due to the potential presence of trace amounts of hexavalent chromium.
Germ cell mutagenicity : No data available
Carcinogenicity : May cause lung cancer through repeated or prolonged exposure to dust.

Crystalline Silica (Quartz) (14808-60-7)	
ACGIH	A2 - Suspected human carcinogen
IARC	1 - Carcinogenic to humans
National Toxicology Program (NTP)	2 - Known Human Carcinogens
OSHA	-

Reproductive toxicity : No data available
Specific target organ toxicity (single exposure) : Inhalation and skin contact. Respiratory tract irritation, skin irritation.
Specific target organ toxicity (repeated exposure) : Inhalation. Respiratory tract and kidneys.
Aspiration hazard : No data available
Symptoms/injuries after inhalation : Adverse symptoms may include the following: respiratory tract irritation, coughing.
Symptoms/injuries after skin contact : Adverse symptoms may include the following: pain or irritation, redness, blistering may occur, skin burns, ulcerations and necrosis may occur.
Symptoms/injuries after eye contact : Adverse symptoms may include the following: pain, watering, redness.
Symptoms/injuries after ingestion : Adverse symptoms may include the following: stomach pains.

SECTION 12: Ecological information

12.1. Ecotoxicity

Chemical name	Result	Species	Exposure
Calcium oxide (1305-78-8)	Chronic NOEC 100 mg/L Fresh water	Fish-Oreochromis niloticus-Juvenile (Fledgling, Hatchling, Weanling)	46 days

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative

No data available.

12.4. Mobility

No data available.

12.5. Other adverse effects

Avoid release to the environment. Prevent material from entering sewers, drains, ditches or waterways.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose of waste material in accordance with applicable federal, state, and local regulations. Avoid creation or breathing dust during disposal. Avoid contact with skin and eyes. Prevent material from entering sewers, drains, ditches or waterways.

SECTION 14: Transport information

14.1 DOT, ADR, IMDG, IATA transportation

In accordance with DOT, ADR, IMDG, IATA

Not regulated for transport

Not regulated as Dangerous Goods

SECTION 15: Regulatory information

15.1. US Federal regulations

SARA 313 : Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories :

Acute health hazard	Chronic health hazard	Fire hazard	Sudden release of pressure hazard	Reactive hazard
No	Yes	No	No	No

CWA : This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (CWA) (40 CFR 122.21 and 40 CFR 122.42).

CERCLA : This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

15.2. US State regulations

California Proposition 65 : This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

US State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Crystalline Silica (Quartz) (14808-60-7)	X	X	X	-	-

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Other information : None

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