

Safety Data Sheet: Gun-Rite DS-1

Revision Date: 05/27/2015



1) Chemical Product and Company Identification

Product details:

Manufacturer/Supplier: JE Tomes & Associates, Inc.
Blue Island, IL 60406
Phone: (877) 538-6637
Fax: (708) 653-5101
www.jetomes.com

Trade Name and Synonyms: Gun-Rite DS-1
Product Description: Dry-Method Shotcrete / Gunitite / Spray-Applied Concrete

2) Hazardous Identifications

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the Product

Skin Corr./Irrit.	2	Skin corrosion/irritation
Eye Dam./Irrit.	1	Serious eye damage/eye irritation
STOT SE	3 (irritating to respiratory system)	Specific target organ toxicity – single exposure
STOT RE	1 (by inhalation)	Specific target organ toxicity – repeated exposure

Label elements

Pictogram:



Signal Word: Danger

Hazard Statement:

H318 Causes serious eye damage.
H315 Causes skin irritation.
H335 May cause respiratory irritation.
H372 Causes damage to organs (Lung) through prolonged or repeated exposure (inhalation).

Precautionary Statements (Prevention):

P289 Wear protective gloves and eye/face protection.
P271 Use only outdoors or in a well-ventilated area.
P260 Do not breathe dust/gas/mist/vapors.
P270 Do not eat, drink or smoke when using this product.
P264 Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (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.
P310 Immediately call a POISON CENTER or doctor/physician.
P303+P352 IF ON SKIN (or hair): Wash with plenty of soap and water.
P362+P364 Take off contaminated clothing and wash before reuse.

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Precautionary Statements (Storage):

P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection point.

Hazards not otherwise classified

If applicable, information is provided in this section on other hazards which do not result in classification, but which may contribute to the overall hazards of the substance or mixture.

3) Composition/Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

CAS #	Component	Percent
65997-15-1	Portland cement	10 - 40
14808-60-7	Crystalline silica	45 - 95
1332-58-7	Kaolin	0.1 - 4
68131-74-8	Ashes (residues)	0.1 - 10

Note: Exact percentages of ingredients have been withheld as a trade secret in accordance with OSHA

4) First Aid Measures

General Advice

First aid personnel should pay attention to their own safety. Remove contaminated clothing.

First Aid: Eyes

Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, get medical attention.

First Aid: Skin

Flush with large amounts of water. Do not use organic solvents. If irritation persists, get medical attention.

First Aid: Ingestion

If material is ingested, immediately contact a physician or poison control center. Drink plenty of water and flush out mouth with water. Do not induce vomiting, unless instructed by poison control center or doctor.

First Aid: Inhalation

Immediately remove the affected person to fresh air. If symptoms persist, seek medical attention.

First Aid: Notes to Physician

Provide general supportive measures and treat symptomatically.

5) Fire-Fighting Measures and Fire Hazards

Extinguishing Media

Foam, water spray, dry powder, carbon dioxide

Unsuitable Extinguishing Media

Water jet (for safety reasons)

Additional Information:

Product is non-combustible. Packaging materials can catch fire. The extinguishing agents normally used are sufficient.

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Special hazards arising from the substance or mixture

Hazards during fire-fighting:

Carbon monoxide, carbon dioxide, harmful vapors

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire. Product is not combustible or explosive.

Advice for fire-fighters

Protective equipment for fire-fighting:

Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

Product itself is non-combustible; fire extinguishing method of surrounding areas must be considered. The degree of risk is governed by the burning substance and the fire conditions. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6) Accidental Release Measures (Spills or Leaks)

Personal Precautions

Avoid the generation of dusts during clean-up. Avoid contact with skin and eyes. Wear appropriate protective equipment and clothing during clean-up.

Containment Procedures

Contain the discharged material.

Environmental Precautions

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. Do not discharge into drains/surface waters/groundwater.

Clean-Up Procedures

Attempt to reclaim the free product, if this is possible. Shovel the material into waste container. Thoroughly wash the area with water after a spill or leak clean-up. Wear appropriate protective equipment and clothing during clean-up. Keep out of the reach of children.

Evacuation Procedures

None identified.

Special Procedures

Wear a dust mask if dust is generated above exposure limits.

7) Handling and Storage

Handling Procedures

Avoid dust formation. The Cement contained in this product reacts alkaline when in contact with water or humidity. This may cause severe irritation of skin or mucous membranes. The humidity of the skin or mucous membranes is enough for this reaction. Prolonged direct contact to the dry product should be avoided therefore. Avoid inhalation of dusts. Avoid skin contact. Pour downwind and allow as little free fall as possible when emptying bags into equipment. Breathing must be protected when large quantities are decanted without local exhaust ventilation.

Protection against fire and explosion:

No special precautions necessary.

Conditions for safe storage, including any incompatibilities

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Segregate from metals. Segregate from acids. Segregate from lyes, Segregate from oxidants. Segregate from foods and animal feeds.

Suitable materials for containers: tinned carbon steel (Tinplate)

Further information on storage conditions: Containers should be stored tightly sealed in a dry place.

8) Exposure Controls, Personal Protection

COMPONENT EXPOSURE LIMITS

Portland Cement (65997-15-1)

ACGIH:	1 mg/m ³ TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)
OSHA:	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)

Crystalline Silica (14808-60-7)

ACGIH:	0.025 mg/m ³ TWA (respirable fraction)
OSHA:	0.1 mg/m ³ TWA (respirable dust)

Ashes - residues (68131-74-8)

ACGIH:	
OSHA:	TWA 2.4 mg/m ³

Kaolin (1332-58-7)

ACGIH:	2 mg/m ³ ; The value is for particulate matter containing no asbestos and < 1% crystalline silica
OSHA:	TWA 15 mg/m ³

Engineering Controls

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits. Local exhaust is suggested for use, where possible, in enclosed or confined spaces.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear safety glasses with side shields or goggles.

Personal Protective Equipment: Skin

The use of nitrile-latex gloves is recommended

Personal Protective Equipment: Respiratory

If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

Personal Protective Equipment: General

Launder contaminated clothing before reuse. Use good industrial hygiene practices in handling this material.

General safety and hygiene measures:

Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts. In order to prevent contamination while handling, closed working clothes and working gloves should be used. Handle in accordance with good building materials hygiene and safety practice. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the skin should be cleaned and skin-care agents applied. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Contaminated equipment or clothing should be cleaned after each use or disposed of.

9) Physical and Chemical Properties

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Form:	powder	
Odor:	odorless	
Odor threshold:		Not determined due to potential health hazard by inhalation.
Color	gray	
pH value:		neutral to slightly alkaline
Melting point:		Unspecified
Boiling point:		N/A
Sublimation point:	N/A	
Flash point:		The substance/product is non-combustible
Flammability:	not determined	
Lower explosion limit:		As a result of our experience with this product and our knowledge of its composition, we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Upper explosion limit:		As a result of our experience with this product and our knowledge of its composition, we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Autoignition:		N/A
Vapor Pressure:		N/A
Density:		N/A
Relative density:	2.8	
Bulk density:	1,800-2,400 kg/m3	
Vapor density:		N/A
Partitioning coefficient n-octanol/water (low Pow):		N/A
Self-ignition temperature:		not self-igniting
Thermal decomposition		No decomposition if stored and handled as prescribed/indicated.
Viscosity, dynamic:		N/A
Viscosity, kinematic:		N/A
Solubility in water:		Product has not been tested.
Solubility (quantitative):		N/A
Solubility (qualitative):		N/A
Evaporation Rate		N/A
Other information:		If necessary, information on other physical and chemical parameters is indicated in this section.

10) Stability and Reactivity

Reactivity

No hazardous reactions if stored and handle as prescribed/indicated.

Oxidizing properties:

Based on its structural properties, the product is not classified as oxidizing.

Chemical Stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

The product is stable if store and handles as prescribed/indicated. Strong bases are formed on the addition of water.

Conditions to avoid

Avoid dust formation. Avoid humidity.

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Incompatible materials

Strong bases, strong acids

Hazardous decomposition products

Decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

No decomposition of stored and handled as prescribed/indicated.

11) Toxicological Information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Product may present a nuisance dust hazard. Inhalation of dust may cause respiratory tract irritation, coughing and breathing difficulties.

Oral

N/A

Inhalation

N/A

Dermal

N/A

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: This product contains crystalline silica (quartz). Prolonged or repeated inhalation of respirable crystalline silica may result in silicosis.

Genetic toxicity

Assessment of mutagenicity: The chemical structure does not suggest a specific alert for such an effect. Based on available data, the classification criteria are not met.

Carcinogenicity

Exposure to quartz (the most stable and common form of crystalline silica) is responsible for the majority of clinically diagnosed silicosis. Silicosis is a fibronodular lung disease that occurs after occupational exposure to crystalline silica for 5 years or longer. Inhalation of quartz dusts may cause shortness of breath, limitation of chest expansion, dry cough, and a lessened capacity for work. Individuals with a pre-existing disease in, or a history of ailments involving the skin or respiratory tract, are at a greater risk of developing adverse health effects when exposed to this material. There may be a relationship between silicosis and certain cancers.

Reproductive toxicity

Assessment of reproductive toxicity: The chemical structure does not suggest a specific alert for such an effect. Based on available data, the classification criteria are not met.

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Teratogenicity

Assessment of teratogenicity: The chemical structure does not suggest a specific alert for such an effect. Based on available data, the classification criteria are not met.

Other information

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

Sensitization

No information available for the product.

12) Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms.

The product gives rise to pH shifts. Based on available data, the classification criteria are not met.

Persistence and degradability

Assessment of biodegradation and elimination (H20)

Inorganic product which cannot be eliminated from water by biological purification processes. The product is slightly soluble in water. It can be largely eliminated from the water by abiotic processes, e.g. mechanical separation.

Experience shows this product to be inert and non-degradable.

Elimination information: N/A

Bioaccumulative potential

Assessment of bioaccumulation potential

The product will not be readily bioavailable due to its consistency and insolubility in water.

Mobility in soil

Assessment of transport between environmental compartments

The substance will not evaporate into the atmosphere from the water surface.

Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

Additional Information

Other ecotoxicological advice:

Do not discharge product into the environment without control. The product has not been tested. The statements on ecotoxicology have been derived from the properties of the individual components.

13) Disposal Considerations

US EPA Waste Number & Descriptions

A: General Product Information

No additional information available.

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B: Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions

Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

14) Transportation Information

International Transportation Regulations

Not regulated as dangerous goods.

15) Regulatory Information

US Federal Regulations

All of the components of this product are listed on, or are exempted from listing on the U.S. EPA TSCA Inventory of Chemical Substances. All components of this product are included, or are exempt from inclusion, in the Canadian Domestic Substance List unless otherwise noted.

State Regulations

The following statement(s) are provided under the California State Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): **WARNING!** This product contains a chemical known to the state of California to cause cancer. This product contains a chemical known to the state of California to cause reproductive/developmental effects.

NFPA Hazard codes:

Health: 3 Fire: 0 Reactivity: 0 Special:

16) Other Information

Disclaimer: Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial and local laws.