MILWHITE, INC
STRONTIUM SULFATE

DISTRIBUTED BY
R.E. CARROLL INC.
1570 NORTH OLDEN AVENUE
TRENTON, NJ 08638-3204
609-695-6211 / 800-257-9365

SDS

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name MicroWate™
Synonyms Naturally occurring strontium sulfate, celestite
CAS Number **7759-02-6**

Manufacturer/Supplier Milwhite, Inc.
5487 S. Padre Island Hwy.
Brownsville, TX 78521

Emergency number For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC – Day or Night. North America 800-424-9300, International + 1956-547-1970.

SECTION 2: HAZARDS IDENTIFICATION

Hazard Overview CAUTION! MAY CAUSE EYE, SKIN AND RESPIRATORY IRRITATION; NUISANCE DUST.
Potential Health Effects CONTAINS CRYSTALLINE SILICA WHICH MAY CAUSE CANCER.

Inhalation Excessive concentrations of dust may cause nuisance condition such as coughing, sneezing, and nasal irritation. Repeated inhalation may cause delayed lung injury.
Ingestion Celestite is considered to be relatively non-toxic under normal use.
Skin Contact Wash with soap and water. Direct contact may cause dryness and itching.
Eye Contact Direct contact may cause mechanical irritation.
Chronic Hazards Breathing crystalline silica can cause lung disease, including silicosis and lung cancer. Crystalline silica has also been associated with scleroderma and kidney disease.

Substances	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Crystalline silica, quartz	14808-60-7	1-5%	TWA: 0.025 mg/m³	10mg/m³ %Si02+2

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Strontium Sulfate	7759-02-6	85-100%	TWA: 10 mg/m³	15 mg/m³

SECTION 4: FIRST AID MEASURES

Inhalation If inhaled, remove to fresh air. Get medical attention for any breathing difficulty.
Ingestion May cause gastric distress, nausea and vomiting if ingested.
Skin contact Wash with soap and water. Contact a physician if irritation persists or later develops.
Eye contact Wash thoroughly with running water at least 15 minutes. Get medical advice if irritation develops.

SECTION 5: FIRE-FIGHTING MEASURES

Flash Point/Range Not Determined
Flash Point Method Not Determined
Autoignition Temperature Not Determined
Flammability Limits in Air-Lower (%) Not Determined
Flammability Limits in Air - Upper (%) Not Determined
Fire Extinguishing Media All standard firefighting media
Special Exposure Hazards Not applicable
Special Protective Equipment for Fire Fighters Not applicable
NFPA Ratings Health 1, Flammability 0, Reactivity 0
HMIS Ratings Health 1, Flammability 0, Reactivity 0, PPE:E
Unusual Fire and Explosion Hazards Not applicable

SECTION 6: ACCIDENTAL RELEASE MEASURES

General Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks Vacuum or sweep material and place in a suitable container. Avoid generating dust. Provide ventilation.
Environmental Precautions None Known.

SECTION 7: HANDLING AND STORAGE

Handling Use personal protection and controls as identified in Section 8. Avoid the generation of dust. Avoid contact with eyes and skin. Wash hands thoroughly after handling.
Storage Keep container closed, store in a cool, dry, ventilated area. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls A system of local and/or general exhaust is recommended to keep employee exposures below the TLV limits and OSHA LIMITS Section 2 & 3.

Respiratory Protection Wear an appropriate NIOSH-approved respirator. Respirator must comply with applicable MSHA or OSHA standards, which include provisions for a user-training program, respirator fit testing, and other requirements.

Skin Protection Work Gloves, Apron/Coveralls

Eye Protection Wear safety glasses or goggles to protect against exposure.

General Hygiene Wash dust-exposed skin with soap and water before eating or drinking. Wash work clothes after each use.

Other Control Measures None known.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	**Powder**
Upper/Lower flammability or Explosive limits:	**Not flammable**
Odor:	**Odorless**
pH:	**7-10**
Specific Gravity @ 20 C (Water=1):	**3.95-4.25**
Density @ 20 C (lbs./gallon):	**Not Determined**
Bulk Density @ 20 C (lbs./ft3):	**130**
Boiling Point/Range (F):	**Not Determined**
Boiling Point/Range (C):	**Not Determined**
Melting Point/Freezing Point/Range (F):	**Not Determined**
Melting Point/Freezing Point/Range (C):	**Not Determined**
Vapor Pressure @ 20 C (mmHg):	**Not Determined**
Vapor Density (Air=1):	**Not Determined**
Percent Volatiles:	**Not Determined**
Evaporation Rate (Butyl Acetate=1):	**Not Determined**
Solubility in Water (g/100ml):	**Insoluble**
Solubility in Solvents (g/100ml):	**Not Determined**
VOCs (lbs./gallon):	**Not Determined**
Viscosity, Dynamic @ 20 C (centipoises):	**Not Determined**
Viscosity, Kinematic @ 20 C (centistrokes):	**Not Determined**
Partition Coefficient/n-Octanol/Water:	**Not Determined**
Flash Point:	**None Flammable**
Auto ignition temperature:	**Non-Flammable**
Decomposition temperature:	**Not Determined**

SECTION 10: STABILITY AND REACTIVITY

Stability	Stable.
Hazardous Polymerization	Will not occur.
Conditions to Avoid	None anticipated
Incompatibility (materials to Avoid)	Not Determined
Hazardous Decomposition Products	Not Determined

SECTION 11: TOXICOLOGICAL INFORMATION

Carcinogenicity: IARC, MTP, OSHA or ACGIH does not list Strontium Sulfate as a Carcinogen.
Toxicological effects ingredients-LD50 and LD50 Data:

Quartz (14808-60-7)	
LD50 Oral Rat	>5000 mg/kg
IARC Group	1
National Toxicity Program (NTP) Status	Known Human Carcinogens.

Principle Route of Exposure

Eye or skin contact, inhalation.

Inhalation

Inhaled crystalline silica in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (IARC, Group 1). There is sufficient evidence in experimental animals for the carcinogenicity of tridytime (IARC2A).

Breathing silica dust may cause irritation of the nose, throat, and respiratory passages. Breathing silica dust may not cause noticeable injury or illness even though permanent lung damage may be occurring. Inhalation of dust may also have serious chronic health effects (See "Chronic Effects/Carcinogenicity" subsection below).

Skin contact

May cause mechanical skin irritation.

Eye Contact

May cause eye irritation.

Ingestion

None known

Aggravated Medical Conditions

Individuals with respiratory disease including but not limited to asthma and bronchitis, or subject to eye irritation, should not be exposed to quartz dust.

Chronic Effects/Carcinogenicity

Silicosis: Excessive inhalation of respirable crystalline silica dust may cause a progressive, disabling, and sometimes-fatal lung disease called silicosis. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness, and reduce pulmonary function. This disease is exacerbated by smoking. individuals with silicosis are predisposed to develop tuberculosis.

Cancer Status: The International Agency for Research on Cancer (IARC) has determined that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources can cause lung cancer in humans (Group 1- carcinogenic to humans) and has determined that there is sufficient evidence in experimental animals for the carcinogenicity of tridymite (Group 2A-possible carcinogen to humans). Refer to IARC Monograph volume 100C(2012) Arsenic, Metals, Fibres and Dusts (Silica Dust, Crystalline, in the form of Quartz or Cristobalite) in conjunction with the use of these minerals. The National Toxicology Program classifies respirable crystalline silica as "Known to be a human carcinogen". Refer to the 9th Report on Carcinogens (2000). The American Conference of Governmental Industrial Hygienist (ACGIH) classifies crystalline silica, quartz, as a suspected human carcinogen (A2).

There is some evidence that breathing respirable crystalline silica or the disease silicosis is associated with an increased incidence of significant disease endpoints such as scleroderma (an immune system disorder manifested by scarring of the lungs, skin, and other organs) and kidney disease.

Other Information For further information consult: Adverse Effects of Crystalline Silica Exposure" published by the American Thoracic Society Medical Section of the American Lung Association, American Journal or Respiratory and Critical Care Medicine, Volume 155, pages 761-768 (1997).

Toxicity Tests

Oral Toxicity: Not determined

Dermal Toxicity: Not determined

Inhalation Toxicity: Not determined

Primary Irritation Effect: Not determined

Carcinogenicity: Refer to IARC Monograph 100C, Arsenic, Metals, Fibres and Dusts (2012).

Genotoxicity: Not determined

Reproductive/Developmental Toxicity: Not determined

SECTION 12: ECOLOGICAL INFORMATION

Environmental Fate:

Mobility (Water/Soil/Air)	Not determined
Persistence/Degradability	Not determined
Bio-accumulation	Not determined

Environmental Toxicity:

Acute Fish Toxicity	Not determined
Acute Crustaceans Toxicity	Not determined
Acute Algae Toxicity	Not determined

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal Method Bury in a licensed landfill according to federal, state and local regulations. Substance should not be deposited into a sewage facility.

Contaminated Packaging Follow all applicable national and local regulations. Contaminated packing may be disposed of by rendering packaging incapable of containing any substance, or by disposing of packaging into commercial waste collection.

SECTION 14: TRANSPORT INFORMATION

Land Transportation

DOT	Not restricted
Canadian TDG	Not restricted
ADR	Not restricted

Air Transportation

ICAO/IATA	Not restricted

Sea Transportation

IMDG	Not restricted

Other Transportation Information

Labels	None

SECTION 15: REGULATORY INFORMATION

US Regulations:	Waste Classification:
US TSCA Inventory	All components listed on inventory or are exempt.
EPA SARA Title III Extremely Hazardous Substances	N/A
EPA SARA (311,312) Hazard Class	Acute Health Hazard; Chronic Health Hazard
EPA SARA (313) Chemicals	This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).
EPA CERCLA/Superfund eportable Spill Quantity	N/A
EPA RCRA Hazardous	If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the U.S. EPA.
California Proposition 65	The California Proposition 65 regulations apply to this product.
MA Right-to-Know Law	One or more components listed.
NJ Right-to-Know Law	One or more components listed
PA Right-to-Know Law	One or more components listed.
Canadian Regulations:	
Canadian DSL Inventory	All components listed on inventory or are exempt.
WHMIS Hazard Class	D2A Very Toxic Materials Crystalline Silica

SECTION 16: OTHER INFORMATION

Date of Revision: 02/05/2015

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