

# Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 05.20.2020

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## SECTION 1: Identification

### Product identifier

Product name: sr65

### Recommended use of the product and restriction on use

Relevant identified uses: Not determined or not applicable.

Uses advised against: Not for Human Consumption.

Reasons why uses advised against: Not determined or not applicable.

### Manufacturer or supplier details

#### Manufacturer:

#### United States

Redmond Minerals, Inc.

2725 N. 100 West

Redmond, Utah 84652

435-201-1322

### Emergency telephone number:

#### United States

CHEMTREC

(800) 424-9300 (24 hours)

## SECTION 2: Hazard(s) identification

### GHS classification:

Specific target organ toxicity - repeated exposure, category 1

### Label elements

#### Hazard pictograms:



Signal word: Danger

### Hazard statements:

H372 Causes damage to organs (lungs) through prolonged or repeated exposure via inhalation.

### Precautionary statements:

P260 Do not breathe dust/fume/gas/mist/vapors/spray

P264 Wash skin thoroughly after handling

P270 Do not eat, drink or smoke when using this product

P314 Get medical advice/attention if you feel unwell

P501 Dispose of contents/container in accordance with all local, regional, state and federal regulations.

### Hazards not otherwise classified:

Material dusts containing less than 1% free crystalline silica (quartz) are classified as nuisance particulates. Exposure to these dusts may cause irritation to eyes, ears, throat, and upper respiratory tract. This materials dust may contain more than 1% free silica as Quartz. Chronic (long term) exposure to air born free silica at levels higher than TLV=s may lead to the development of silicosis or other respiratory problems.

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## SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 7732-18-5	Water	5-10
CAS number: 14808-60-7	Silica, crystalline quartz	<4
CAS number: 1302-78-9	Bentonite	50-65
CAS number: 14464-46-1	Cristobalite	<1
CAS number: 15468-32-3	Tridymite	<1
CAS number: 7647-14-5	Sodium chloride	10-20
CAS number: 1344-01-0	Silicic acid, aluminum calcium sodium salt	15-25

### Additional Information:

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200).

## SECTION 4: First aid measures

### Description of first aid measures

#### General notes:

Show this Safety Data Sheet to the doctor in attendance.

#### After inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If experiencing respiratory symptoms, seek medical advice/attention.

#### After skin contact:

Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse. If symptoms develop or persist, seek medical advice/attention.

#### After eye contact:

Rinse eyes with plenty of water for several minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. If symptoms develop or persist, seek medical advice/attention.

#### After swallowing:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention.

### Most important symptoms and effects, both acute and delayed

#### Acute symptoms and effects:

Inhalation of airborne dust may cause respiratory irritation. Symptoms include cough, sore throat and inflammation of the mucous membranes lining the respiratory tract.

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Airborne dust may cause mechanical irritation of the eyes and skin. Direct eye contact may result in corneal injury. Symptoms include irritation, redness, pain, inflammation, itching, burning and tearing.

### Delayed symptoms and effects:

Prolonged and/or repeated exposure to respirable silica may cause damage to lungs, kidneys and immune system. Prolonged and/or repeated exposure to silica-containing dust may cause lung damage and a lung disease called silicosis. Silicosis is a progressive and disabling lung disease that causes pulmonary fibrosis, chronic obstructive pulmonary disorder (COPD) and lung cancer. Silicosis lowers the immune system and makes an individual more susceptible to tuberculosis. Silicosis may also cause renal disease and scleroderma – a disease affecting skin, blood vessels, joints and skeletal muscles. Symptoms of silicosis may include (but are not limited to) shortness of breath, difficulty breathing with or without exertion; coughing; diminished work capacity; diminished chest expansion; reduction of lung volume; right heart enlargement and/or failure. Not all individuals with silicosis will exhibit symptoms of the disease. However, silicosis can be progressive, and symptoms can appear at any time, even years after exposures have ceased.

### Immediate medical attention and special treatment

#### Specific treatment:

Not determined or not applicable.

#### Notes for the doctor:

Treat symptomatically.

## SECTION 5: Firefighting measures

### Extinguishing media

#### Suitable extinguishing media:

Water mist/fog, carbon dioxide, dry chemical or alcohol resistant foam.

#### Unsuitable extinguishing media:

Do not use water jet.

### Specific hazards during fire-fighting:

Thermal decomposition may lead to the release of irritating and toxic substances, including: silicon oxides, sodium oxides, calcium oxides and aluminum oxides.

### Special protective equipment for firefighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-face piece operated in positive pressure mode.

### Special precautions:

Move containers from fire area if safe to do so. Use water spray/fog for cooling fire exposed containers.

Avoid unnecessary run-off of extinguishing media which may cause pollution.

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures:

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid breathing dust; wear respirator approved for silica bearing dust. Do not walk through spilled material. Avoid generation and dispersal of dust.

### Environmental precautions:

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided.

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## Methods and material for containment and cleaning up:

Vacuum or carefully sweep up while minimizing the generation and dispersal of dust. Place in a suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

## Reference to other sections:

Section 8: Personal Protective Equipment

Section 13: Disposal

## SECTION 7: Handling and storage

### Precautions for safe handling:

Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation to keep exposure limits below permissible limits. Avoid contact with eyes, skin and clothing. This product contains quartz, cristobalite, and/or tridymite which may become airborne without a visible cloud. Avoid breathing dust. Avoid dust generation and accumulation. Do not eat, drink or smoke while handling this product. Wash hands, forearms and face after handling. Keep away from incompatible materials (see Section 10). Keep containers tightly closed when not in use.

### Conditions for safe storage, including any incompatibilities:

Store in a cool, dry and well-ventilated area. Store away from heat, open flames and other sources of ignition. Keep containers tightly closed when not in use. Store away from incompatible materials (See Section 10). Do not reuse empty container. Use good housekeeping in storage and work areas to prevent accumulation of dust.

## SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

### Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
OSHA	Silica, crystalline quartz	14808-60-7	8-Hour TWA-PEL: 0.05 mg/m <sup>3</sup>
	Silica, crystalline quartz	14808-60-7	8-Hour TWA-PEL: 0.025 mg/m <sup>3</sup> (Action Level)
	Cristobalite	14464-46-1	8-Hour TWA-PEL: 0.025 mg/m <sup>3</sup> (Action level)
	Cristobalite	14464-46-1	8-Hour TWA-PEL: 0.05 mg/m <sup>3</sup>
	Tridymite	15468-32-3	8-Hour TWA-PEL: 0.05 mg/m <sup>3</sup>
	Tridymite	15468-32-3	8-Hour TWA-PEL: 0.025 mg/m <sup>3</sup> (Action Level)
ACGIH	Silica, crystalline quartz	14808-60-7	8-Hour TWA: 0.025 mg/m <sup>3</sup> (respirable particulate matter)
	Cristobalite	14464-46-1	8-Hour TWA: 0.025 mg/m <sup>3</sup> (respirable particulate matter)
	Tridymite	15468-32-3	8-Hour TWA: 0.025 mg/m <sup>3</sup> (respirable particulate matter)
	Silicic acid, aluminum calcium sodium salt	1344-01-0	8-Hour TWA: 1 mg/m <sup>3</sup> (Aluminum metal and insoluble compounds, Respirable Fraction)
NIOSH	Silica, crystalline quartz	14808-60-7	REL-TWA: 0.05 mg/m <sup>3</sup> (up to 10 hrs.)
	Silica, crystalline quartz	14808-60-7	IDLH: 25 mg/m <sup>3</sup>
	Cristobalite	14464-46-1	REL-TWA: 0.05 mg/m <sup>3</sup> (up to 10 hrs.)

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Cristobalite	14464-46-1	IDLH: 25 mg/m <sup>3</sup>
	Tridymite	15468-32-3	IDLH: 25 mg/m <sup>3</sup>
	Tridymite	15468-32-3	REL-TWA: 0.05 mg/m <sup>3</sup> (up to 10 hrs.)
	Silicic acid, aluminum calcium sodium salt	1344-01-0	REL: 2 mg/m <sup>3</sup> (Aluminum (soluble salts and alkyls, as Al) 10 h workday)
United States(California)	Silica, crystalline quartz	14808-60-7	8-Hour TWA-PEL: 0.05 mg/m <sup>3</sup>
	Cristobalite	14464-46-1	8-Hour TWA-PEL: 0.025 mg/m <sup>3</sup>
	Tridymite	15468-32-3	8-Hour TWA-PEL: 0.05 mg/m <sup>3</sup>
	Silicic acid, aluminum calcium sodium salt	1344-01-0	8-Hour TWA: 2 mg/m <sup>3</sup> (Aluminum soluble salts)

## Biological limit values:

No biological exposure limits noted for the ingredient(s).

## Information on monitoring procedures:

Not determined or not applicable.

## Appropriate engineering controls:

Use local exhaust, mechanical ventilation or additional engineering measures to maintain airborne concentration below any occupational exposure limits. Ensure that Emergency eye wash station and safety shower are in good working order and in the immediate vicinity of any possible exposure.

## Personal protection equipment

### Eye and face protection:

Safety glasses or goggles. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

### Skin and body protection:

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Wear a properly fitted, air-purifying or air-fed respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## General hygienic measures:

When handling chemical products, do not eat, drink or smoke. Wash hands after handling, before breaks, and at the end of the workday. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Perform routine housekeeping.

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## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

Appearance	Granular/Powder of Variable Color
Odor	Not determined or not available.
Odor threshold	Not determined or not available.
pH	Not determined or not available.
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	Not determined or not available.
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	Not determined or not available.
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

### Other information

## SECTION 10: Stability and reactivity

### Reactivity:

Not reactive under recommended handling and storage conditions.

### Chemical stability:

Stable under recommended handling and storage conditions.

### Possibility of hazardous reactions:

Hazardous reactions are not anticipated under recommended conditions of handling and storage.

### Conditions to avoid:

Extreme heat; Open flame; Ignition sources; Dust generation and accumulation; Incompatible materials

### Incompatible materials:

Strong oxidizers; Acids

### Hazardous decomposition products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### Acute toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

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## Substance data:

Name	Route	Result
Sodium chloride	oral	LD50 Rat: 3000 mg/kg
	inhalation	LC50 Rat: 42,000 mg/m <sup>3</sup> (1 hr.)
	dermal	LD50 Rabbit: >10,000 mg/kg
Silicic acid, aluminum calcium sodium salt	dermal	LD50 Rabbit: >5000 mg/kg
	oral	LD50 Mouse: >2000 mg/kg

## Skin corrosion/irritation

**Assessment:** Based on available data, the classification criteria are not met.

### Product data:

No data available.

**Substance data:** No data available.

## Serious eye damage/irritation

**Assessment:** Based on available data, the classification criteria are not met.

### Product data:

No data available.

**Substance data:** No data available.

## Respiratory or skin sensitization

**Assessment:** Based on available data, the classification criteria are not met.

### Product data:

No data available.

**Substance data:** No data available.

## Carcinogenicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

### Substance data:

Name	Species	Result
Silica, crystalline quartz	Not applicable	May cause lung cancer via inhalation.
Cristobalite		Inhalation of respirable silica may cause cancer.
Tridymite		May cause lung cancer via inhalation.

## International Agency for Research on Cancer (IARC):

Name	Classification
Silica, crystalline quartz	Group 1
Cristobalite	Group 1
Tridymite	Group 1

## National Toxicology Program (NTP):

Name	Classification
Silica, crystalline quartz	Known to be human carcinogens
Cristobalite	Known to be human carcinogens
Tridymite	Known to be human carcinogens

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## OSHA Carcinogens:

Ingredient Name	CAS	OSHA Carcinogens Status
Silica, crystalline quartz (respirable)	14808-60-7	Yes

## Germ cell mutagenicity

**Assessment:** Based on available data, the classification criteria are not met.

### Product data:

No data available.

**Substance data:** No data available.

## Reproductive toxicity

**Assessment:** Based on available data, the classification criteria are not met.

### Product data:

No data available.

**Substance data:** No data available.

## Specific target organ toxicity (single exposure)

**Assessment:** Based on available data, the classification criteria are not met.

### Product data:

No data available.

**Substance data:** No data available.

## Specific target organ toxicity (repeated exposure)

### Assessment:

Causes damage to organs through prolonged or repeated exposure.

### Product data:

No data available.

### Substance data:

Name	Result
Silica, crystalline quartz	Causes damage to organs (lungs; kidneys; immune system) through prolonged or repeated exposure via inhalation.
Cristobalite	Causes damage to organs (lungs; kidneys; immune system) through prolonged or repeated exposure via inhalation.
Tridymite	Causes damage to organs (lungs; kidneys; immune system) through prolonged or repeated exposure via inhalation.

## Aspiration toxicity

**Assessment:** Based on available data, the classification criteria are not met.

### Product data:

No data available.

**Substance data:** No data available.

## Information on likely routes of exposure:

Inhalation; Ingestion; Skin contact; Eye contact

## Symptoms related to the physical, chemical and toxicological characteristics:

Refer to Section 4 of this SDS.

## Other information:

No data available.



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## SECTION 12: Ecological information

### Acute (short-term) toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:**

Name	Result
Bentonite	LC50 Oncorhynchus mykiss: 19000 mg/L (96 h)
Silicic acid, aluminum calcium sodium salt	EC50 Pseudokirchneriella subcapitata: >75 mg/L (72 h)
	EC50 Daphnia magna: >75 mg/L (48 h)

### Chronic (long-term) toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available.

**Substance data:** No data available.

### Persistence and degradability

**Product data:** No data available.

**Substance data:**

Name	Result
Silicic acid, aluminum calcium sodium salt	Biodegradability studies are not required for inorganic chemicals as they cannot be tested for biodegradability.

### Bioaccumulative potential

**Product data:** No data available.

**Substance data:**

Name	Result
Silicic acid, aluminum calcium sodium salt	This study is waived as the substance is inorganic and therefore has a low potential for bioaccumulation.

### Mobility in soil

**Product data:** No data available.

**Substance data:** No data available.

### Results of PBT and vPvB assessment

**Product data:**

**PBT assessment:** This product does not contain any substances that are assessed to be a PBT.

**vPvB assessment:** This product does not contain any substances that are assessed to be a vPvB.

**Substance data:**

**PBT assessment:**

Sodium chloride	This substance is not PBT.
Silicic acid, aluminum calcium sodium salt	PBT assessment does not apply as substance is an inorganic salt.

**vPvB assessment:**

Sodium chloride	This substance is not vPvB.
Silicic acid, aluminum calcium sodium salt	vPvB assessment does not apply as substance is an inorganic salt.

**Other adverse effects:** No data available.

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## SECTION 13: Disposal considerations

### Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory agencies. Dispose of in accordance with all applicable local, regional, state and federal regulations.

### Contaminated packages:

Not determined or not applicable.

## SECTION 14: Transport information

### United States Transportation of dangerous goods (49 CFR DOT)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

### International Maritime Dangerous Goods (IMDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

### International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

## SECTION 15: Regulatory information

### United States regulations

**Inventory listing (TSCA):** All ingredients are listed or exempt from listing.

**Significant New Use Rule (TSCA Section 5):** None of the ingredients are listed.

**Export notification under TSCA Section 12(b):** None of the ingredients are listed.

**SARA Section 302 extremely hazardous substances:** None of the ingredients are listed.

**SARA Section 313 toxic chemicals:** None of the ingredients are listed.

**CERCLA:** None of the ingredients are listed.

**RCRA:** None of the ingredients are listed.

**Section 112(r) of the Clean Air Act (CAA):** None of the ingredients are listed.

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## New Jersey Right to Know:

14808-60-7	Silica, crystalline quartz	Listed
14464-46-1	Cristobalite	Listed
15468-32-3	Tridymite	Listed

New York Right to Know: None of the ingredients are listed.

## Pennsylvania Right to Know:

14808-60-7	Silica, crystalline quartz	Listed
14464-46-1	Cristobalite	Listed
15468-32-3	Tridymite	Listed
1344-01-0	Silicic acid, aluminum calcium sodium salt	Listed

## California Proposition 65:

**⚠️WARNING:** This product can expose you to Silica, crystalline (airborne particles of respirable size); which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## SECTION 16: Other information

**Abbreviations and Acronyms:** None

### Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal 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, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

**NFPA:** 1-0-0

**HMIS:** 1\*-0-0

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End of Safety Data Sheet