

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 05.20.2020

Page 1 of 10

Number 10 Fine with Garlic

SECTION 1: Identification

Product identifier

Product name: Number 10 Fine with Garlic

Recommended use of the product and restriction on use

Relevant identified uses: Livestock feed. Flavoring component for further processing.

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: Not a hazardous substance or mixture

Label elements

Hazard pictograms: None

Signal word: None

Hazard statements: None

Precautionary statements: None

Hazards not otherwise classified:

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

This product contains Silica, crystalline quartz (< 1.0%). Prolonged and/or repeated exposure to respirable silica 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.

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 1344-01-0	Silicic acid, aluminum calcium sodium salt	48-65

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 05.20.2020

Page 2 of 10

Number 10 Fine with Garlic

CAS number: 7647-14-5	Sodium chloride	34-50
CAS number: 539-86-6	Allicin	<1
CAS number: 14808-60-7	Silica, crystalline quartz	<1

Additional Information:

The specific chemical identity and/or exact percentages (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. If respiratory symptoms develop or persist: Seek medical advice/attention.

After skin contact:

Wash affected area with plenty of soap and water. Remove contaminated clothing and launder before reuse. If skin irritation develops or persists: Seek medical advice/attention.

After eye contact:

Immediately rinse eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 15 minutes. If eye irritation develops or persists: 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:

Prolonged exposure may cause skin, eye and respiratory irritation. Ingestion may cause adverse effects.

Delayed symptoms and effects:

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.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 05.20.2020

Page 3 of 10

Number 10 Fine with Garlic

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, calcium oxides, aluminum oxides and sodium 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. Contain spilled material and prevent run-off onto ground or into water sources or sewers.

Methods and material for containment and cleaning up:

Sweep up dry material and place in a suitable container for future disposal. Minimize generation and dispersal of dust. If product is wet, absorb or cover with dry earth, sand or other non-combustible material and place in a suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

Reference to other sections:

For disposal see Section 13.

For personal protection see Section 8.

SECTION 7: Handling and storage

Precautions for safe handling:

Wear recommended personal protective equipment (see section 8). Only use with adequate ventilation. Do not taste or swallow. Avoid contact with eyes, skin and clothing. Avoid breathing dust. 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, well ventilated place. Store away from sources of heat or ignition. Store away from incompatible materials described in Section 10. Keep containers tightly closed when not in use.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 05.20.2020

Page 4 of 10

Number 10 Fine with Garlic

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
ACGIH	Silicic acid, aluminum calcium sodium salt	1344-01-0	8-Hour TWA: 1 mg/m ³ (Aluminum metal and insoluble compounds, Respirable Fraction)
	Silica, crystalline quartz	14808-60-7	8-Hour TWA: 0.025 mg/m ³ (respirable particulate matter)
NIOSH	Silicic acid, aluminum calcium sodium salt	1344-01-0	REL: 2 mg/m ³ (Aluminum (soluble salts and alkyls, as Al) 10 h workday)
	Silica, crystalline quartz	14808-60-7	REL-TWA: 0.05 mg/m ³ (up to 10 hrs.)
	Silica, crystalline quartz	14808-60-7	IDLH: 25 mg/m ³
United States(California)	Silicic acid, aluminum calcium sodium salt	1344-01-0	8-Hour TWA: 2 mg/m ³ (Aluminum soluble salts)
	Silica, crystalline quartz	14808-60-7	8-Hour TWA-PEL: 0.05 mg/m ³
OSHA	Silica, crystalline quartz	14808-60-7	8-Hour TWA-PEL: 0.05 mg/m ³
	Silica, crystalline quartz	14808-60-7	8-Hour TWA-PEL: 0.025 mg/m ³ (Action Level)

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).

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 05.20.2020

Page 5 of 10

Number 10 Fine with Garlic

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.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Tan, granular powder
Odor	Characteristic
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)	Supports Combustion
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 normal conditions of use and storage.

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 oxidizing agents, acids and bases.

Hazardous decomposition products:

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

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 05.20.2020

Page 6 of 10

Number 10 Fine with Garlic

SECTION 11: Toxicological information

Acute toxicity

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

Product data: No data available.

Substance data:

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

Skin corrosion/irritation

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

Product data:

No data available.

Substance data:

Name	Result
Allicin	Causes skin irritation.

Serious eye damage/irritation

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

Product data:

No data available.

Substance data:

Name	Result
Allicin	Causes serious eye irritation.

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.

International Agency for Research on Cancer (IARC):

Name	Classification
Silica, crystalline quartz	Group 1

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 05.20.2020

Page 7 of 10

Number 10 Fine with Garlic

National Toxicology Program (NTP):

Name	Classification
Silica, crystalline quartz	Known to be human carcinogens

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:

Name	Result
Allicin	May cause respiratory irritation.

Specific target organ toxicity (repeated exposure)

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

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.

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.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 05.20.2020

Page 8 of 10

Number 10 Fine with Garlic

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
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.
Allicin	Not expected to bioaccumulate (log Kow = 1.87).

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:

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

vPvB assessment:

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

Other adverse effects: No data available.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 05.20.2020

Page 9 of 10

Number 10 Fine with Garlic

SECTION 13: Disposal considerations

Disposal methods:

Product should be disposed of in accordance with applicable local, state, and federal regulations. There are no known environmental precautionary measures. Consider possible toxic or fire hazards associated with contaminating substances and use appropriate methods for collection, storage, and disposal.

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.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 05.20.2020

Page 10 of 10

Number 10 Fine with Garlic

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

Massachusetts Right to Know:

14808-60-7	Silica, crystalline quartz	Listed
------------	----------------------------	--------

New Jersey Right to Know:

14808-60-7	Silica, crystalline quartz	Listed
------------	----------------------------	--------

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

Pennsylvania Right to Know:

1344-01-0	Silicic acid, aluminum calcium sodium salt	Listed
14808-60-7	Silica, crystalline quartz	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

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

Initial preparation date: 05.20.2020

End of Safety Data Sheet