



Rescoweld FS

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Issue date: 2/26/2019 Revision date: 9/11/2024 Supersedes: 9/13/2021

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Rescoweld FS
CAS-No. : Mixture
Product code : 7570
Other means of identification : Silica Weld Powder

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Refractory
Recommended use : Industrial use

1.3. Supplier

Resco Products, Inc.
One Robinson Plaza, Suite 300
6600 Steubenville Pike
Pittsburgh, PA, 15205
United States
T 412-494-4491
SDS@RescoProducts.com - WWW.RescoProducts.com

1.4. Emergency telephone number

Emergency number : EMERGENCY ONLY (CHEMTREC) USA & Canada 1-800-424-9300
Outside USA & Canada +1 703-741-5970

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Skin corrosion/irritation Category 2	H315	Causes skin irritation
Serious eye damage/eye irritation Category 2B	H320	Causes eye irritation
Carcinogenicity Category 1A	H350	May cause cancer (Inhalation)

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger
Hazard statements (GHS US) : H350 - May cause cancer (Inhalation)
H320 - Causes eye irritation
H315 - Causes skin irritation
Precautionary statements (GHS US) : P260 - Do not breathe dust.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P280 - Wear Respiratory Protection, protective gloves, eye protection, In case of insufficient ventilation, wear suitable respiratory equipment.

2.3. Other hazards which do not result in classification

Other hazards which do not result in classification : Dust may form explosive mixture in air.

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Silicon Metal Powder	CAS-No.: 7440-21-3	10 – 20	Not classified
cristobalite	CAS-No.: 14464-46-1	5 – 10	Carc. 1A, H350
quartz	CAS-No.: 14808-60-7	5 – 10	Carc. 1A, H350

Full text of hazard classes and H-statements : see section 16

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SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person.
First-aid measures after inhalation	: Allow affected person to breathe fresh air.
First-aid measures after skin contact	: Gently wash with plenty of soap and water.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting.

4.2. Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and symptoms	: Danger of serious damage to health by prolonged exposure through inhalation.
Symptoms/effects after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. May cause cancer by inhalation.
Symptoms/effects after skin contact	: Contact during a long period may cause slight irritation.
Symptoms/effects after eye contact	: Causes eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Dry powder. Dry sand. Carbon dioxide (CO ₂).
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5.2. Specific hazards arising from the chemical

Fire hazard	: Dry Silicon Metal in the form of lumps or granules (Bottom Screen >200 mesh) is not combustible.
Explosion hazard	: Dust cloud can be ignited by a spark.

5.3. Special protective equipment and precautions for fire-fighters

No additional information available

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Avoid contact with skin and eyes.
6.1.1. For non-emergency personnel	
Protective equipment	: Do not breathe dust.
6.1.2. For emergency responders	
Protective equipment	: Use personal protective equipment as required.
Emergency procedures	: Ventilate area.

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Collect spillage. Prevent dust cloud formation.
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6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Avoid raising powdered material due to explosion hazard. Avoid contact with skin and eyes.
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store this product in a dry location where it can be protected from the elements. Store in a well-ventilated place.
Incompatible materials	: Strong acids, bases. water.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Rescoweld FS (Mixture)

No additional information available

cristobalite (14464-46-1)

USA - ACGIH - Occupational Exposure Limits

ACGIH OEL TWA	0.025 mg/m ³ respirable dust
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crystalobalite (14464-46-1)

USA - OSHA - Occupational Exposure Limits

OSHA PEL (TWA) [1] 0.05 mg/m³ respirable dust

Silicon Metal Powder (7440-21-3)

No additional information available

quartz (14808-60-7)

USA - ACGIH - Occupational Exposure Limits

ACGIH OEL TWA 0.025 mg/m³ (Silica-Crystalline Quartz; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Respirable fraction)

USA - OSHA - Occupational Exposure Limits

Local name Silica, crystalline quartz, respirable dust

OSHA PEL (TWA) [1] 0.05 mg/m³ respirable dust

Remark (OSHA) (3) See Table Z-3.

8.2. Appropriate engineering controls

Appropriate engineering controls : Provide adequate ventilation to minimize dust concentrations.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves.

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Granular powder.
Color	: Gray
Odor	: None
Odor threshold	: No data available
pH	: No data available
Melting point	: > 1100 °F
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not flammable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: ≈ 1.3
Solubility	: Insoluble.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: Product not explosive, although dusts may form explosive mixtures with air.
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

None known.

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10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Prolonged contact with water may release hydrogen. Reactions with acids and alkalis may release hazardous gases, including hydrogen.

10.4. Conditions to avoid

Avoid dust formation. Product not explosive, although dusts may form explosive mixtures with air.

10.5. Incompatible materials

Acids. Oxidizing agent. Strong bases. Water :

10.6. Hazardous decomposition products

May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified
Skin corrosion/irritation : Causes skin irritation.

crystalite (14464-46-1)

pH	6 – 7
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quartz (14808-60-7)

pH	6 – 7
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Serious eye damage/irritation : Causes eye irritation.

crystalite (14464-46-1)

pH	6 – 7
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quartz (14808-60-7)

pH	6 – 7
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Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : May cause cancer (Inhalation).

quartz (14808-60-7)

IARC group	1 - Carcinogenic to humans
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Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified
Viscosity, kinematic : No data available
Potential Adverse human health effects and symptoms : Danger of serious damage to health by prolonged exposure through inhalation.
Symptoms/effects after inhalation : Danger of serious damage to health by prolonged exposure through inhalation. May cause cancer by inhalation.
Symptoms/effects after skin contact : Contact during a long period may cause slight irritation.
Symptoms/effects after eye contact : Causes eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

crystalite (14464-46-1)

Persistence and degradability	Mineral. Not applicable.
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Chemical oxygen demand (COD)	Not applicable
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ThOD	Not applicable
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BOD (% of ThOD)	Not applicable
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quartz (14808-60-7)

Persistence and degradability	Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

12.3. Bioaccumulative potential

crystalite (14464-46-1)

Bioaccumulative potential	No data available.
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quartz (14808-60-7)

Bioaccumulative potential	No data available.
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12.4. Mobility in soil

crystalite (14464-46-1)

Ecology - soil	No data available.
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12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

Department of Transportation (DOT)

In accordance with DOT

Not regulated

Transportation of Dangerous Goods

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

CANADA

crystalite (14464-46-1)

Listed on the Canadian DSL (Domestic Substances List)

Silicon Metal Powder (7440-21-3)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

quartz (14808-60-7)

Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations

Rescoweld FS (Mixture)

U.S. - California - Proposition 65 - Other information	This product contains crystalline silica, a chemical known to the State of California to cause cancer. For more information go to WWW.P65Warnings.ca.gov
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crystalite (14464-46-1)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No		

quartz (14808-60-7)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No		

Component	State or local regulations
Cristobalite (14464-46-1)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
Silicon Metal Powder (7440-21-3)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
Quartz (14808-60-7)	U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

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Revision date : 9/11/2024

Other information : Report language name. English. In the event of any conflict between English and other language versions, the English version shall prevail.

Full text of H-phrases

H315	Causes skin irritation
H320	Causes eye irritation
H350	May cause cancer

Safety Data Sheet (SDS), USA

This information and recommendations set forth herein are taken from sources believed to be accurate as of the date herein, however, Resco Products, Inc. makes no warranty with respect to the accuracy of the information or the suitability of the recommendations, and assumes no liability to any user thereof.