Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Revision Date: 08/20/2021 Date of Issue: 03/18/2021

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: SURE/CUT Velocity

1.2. Intended Use of the Product

Raw Material - Industrial Uses

1.3. Name, Address, and Telephone of the Responsible Party

Company

Harsco Corporation Harsco Environmental 350 Poplar Church Road Camp Hill, PA 17011 Phone: 1-888-733-3646 E-Mail: reedcs@harsco.com

1.4. Emergency Telephone Number

Emergency Number: Verisk 3E

855-393-9889 (Access Code: 13793)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US/CA Classification

Not classified

2.2. Label Elements

GHS-US/CA Labeling

No labeling applicable according to 29 CFR 1910.1200 and the Hazardous Products Regulations (HPR) SOR/2015-17.

2.3. Other Hazards

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

2.4. Unknown Acute Toxicity (GHS-US/CA)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Synonyms	Product Identifier	% *	GHS Ingredient Classification
Iron oxide (Fe2O3)	C.I. 77491 / C.I. Pigment Red 101 / Diiron trioxide / Ferric oxide / Iron sesquioxide / Iron(III) oxide / Red Iron Oxide / Rouge / CI 77491 / Iron trioxide / Sienna / Pigment Red 101 / Red iron oxide / Red iron oxide pigment / Iron Oxide Red / Diiron(III) trioxide / Iron oxide / Ferric oxide red / Iron oxide, red	(CAS-No.) 1309-37-1	30 – 35	Comb. Dust
Silica, amorphous	Amorphous silica / Silica / Silica, amorphous, fumed / Silica, colloidal / Silicon dioxide / Silicon dioxide, amorphous / SILICA / Silicon(IV) oxide / Un- crystalline silica / Pigment White 27 / Silicon dioxide (amorphous) / Silicon dioxide amorphous / Silicon(IV)oxide /	(CAS-No.) 7631-86-9	15 – 20	Not classified

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	Silica amorphous / Silicon dioxide containing crystalline and amorphous / Fumed silica / SOLUM DIATOMEAE / silicon dioxide			
Magnesium oxide (MgO)	Calcined magnesite / Magnesium oxide / MAGNESIUM OXIDE / Magnesia	(CAS-No.) 1309-48-4	5 – 10	Not classified
Aluminum oxide (Al2O3)	Aluminum oxide / .alpha Alumina / Alumina / Aluminium oxide / Aluminium oxide (Al2O3) / .alpha Aluminum oxide / Alundum / ALUMINA / Dialuminium trioxide / Dialuminum trioxide	(CAS-No.) 1344-28-1	5 – 10	Not classified
Manganese oxide (MnO)	Cassel Green / Manganese monoxide / Manganous oxide / Manganese(II) oxide / Manganese(2+) oxide / Manganese oxide / Manganese monooxide / MANGANESE OXIDE	(CAS-No.) 1344-43-0	5-10	Not classified
Chromium oxide (Cr2O3)	C.I. 77288 / C.I. Pigment Green 17 / Chromic oxide / Chromium Oxide Green / Chromium(3+) oxide / Dichromium trioxide / Chromium sesquioxide / CHROMIUM OXIDE GREENS / Pigment Green 17 / Chromium(III) oxide (Cr2O3) / Dichromium(III) trioxide / Chromium oxide green / CI 77288 / Chromium oxide / Chromium (III) oxide (Cr2O3)	(CAS-No.) 1308-38-9	< 2	Not classified
Titanium dioxide	C.I. 77891 / C.I. Pigment White 6 / Titanium oxide (TiO2) / CI 77891 / Titanium(IV) oxide / C.I. Pigment White 7 / Pigment White 6 / Titanium dioxide nanoparticles / Titanium oxide / Titanium dioxide(2)	(CAS-No.) 13463-67-7	<1	Not classified
Quartz	Quartz (SiO2) / Silica, crystalline, quartz / Crystalline silica, quartz / .alphaQuartz / Silica, crystalline, .alpha quartz / QUARTZ / Crystalline silica in the form of quartz / Quartz, silica / Quartz (respirable fraction) / Silica dust / Silica, crystallinealpha.quartz / Silica, .alpha quartz / Silicon dioxide / Silica, quartz / Silica, crystalline / Quartz (crystalline silica) / Silica dust, crystalline / QUARTZ POWDER / Silica, crystalline (quartz)	(CAS-No.) 14808-60-7	< 0.1	Carc. 1A, H350 STOT SE 3, H335 STOT RE 1, H372

Full text of H- and EUH-statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

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^{*}Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

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General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 5 minutes. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: Not expected to present a significant hazard under anticipated conditions of normal use.

Inhalation: Prolonged exposure may cause irritation.

Skin Contact: Prolonged exposure may cause skin irritation.

Eye Contact: May cause slight irritation to eyes. **Ingestion:** Ingestion may cause adverse effects.

Chronic Symptoms: Repeated or prolonged inhalation of dust particles may cause effects on the lungs. This may result in fibrosis (pneumoconiosis).

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Metal oxides.

5.4. Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid prolonged contact with eyes, skin and clothing. Avoid breathing dust.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Recover the product by vacuuming, shoveling or sweeping. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

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6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing dust.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

7.3. Specific End Use(s)

Raw Material - Industrial Uses

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), or Canadian provincial governments.

Magnesium oxide (MgO) (13	809-48-4)	
USA ACGIH	ACGIH OEL TWA	10 mg/m³ (inhalable particulate matter)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA OSHA	OSHA PEL (TWA) [1]	15 mg/m³ (fume, total particulate)
USA IDLH	IDLH	750 mg/m³ (fume)
Alberta	OEL TWA	10 mg/m³ (fume)
British Columbia	OEL STEL	10 mg/m³ (respirable dust and fume)
British Columbia	OEL TWA	10 mg/m³ (fume, inhalable)
		3 mg/m³ (respirable dust and fume)
Manitoba	OEL TWA	10 mg/m³ (inhalable particulate matter)
New Brunswick	OEL TWA	10 mg/m³ (fume)
Newfoundland & Labrador	OEL TWA	10 mg/m³ (inhalable particulate matter)
Nova Scotia	OEL TWA	10 mg/m³ (inhalable particulate matter)
Nunavut	OEL STEL	20 mg/m³ (inhalable fraction)
Nunavut	OEL TWA	10 mg/m³ (inhalable fraction)
Northwest Territories	OEL STEL	20 mg/m³ (inhalable fraction)
Northwest Territories	OEL TWA	10 mg/m³ (inhalable fraction)
Ontario	OEL TWA	10 mg/m³ (inhalable particulate matter)
Prince Edward Island	OEL TWA	10 mg/m³ (inhalable particulate matter)
Québec	VEMP (OEL TWA)	10 mg/m³ (inhalable dust)
Saskatchewan	OEL STEL	20 mg/m³ (inhalable fraction)
Saskatchewan	OEL TWA	10 mg/m³ (inhalable fraction)
Yukon	OEL STEL	10 mg/m³ (fume)
Yukon	OEL TWA	10 mg/m³ (fume)
Aluminum oxide (Al2O3) (13	44-28-1)	
USA ACGIH	ACGIH OEL TWA	10 mg/m ³
USA OSHA	OSHA PEL (TWA) [1]	15 mg/m³ (total dust)
		5 mg/m³ (respirable fraction)
Alberta	OEL TWA	10 mg/m³
New Brunswick	OEL TWA	10 mg/m³ (particulate matter containing no Asbestos and
		<1% Crystalline silica)
Nunavut	OEL STEL	20 mg/m ³

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Nimerusk	OFI TWA	10 /3
Nunavut	OEL TWA	10 mg/m³
Northwest Territories	OEL STEL	20 mg/m³
Northwest Territories	OEL TWA	10 mg/m ³
Québec	VEMP (OEL TWA)	10 mg/m³ (containing no Asbestos and <1% Crystalline
		silica-total dust)
Saskatchewan	OEL STEL	20 mg/m³
Saskatchewan	OEL TWA	10 mg/m³
Yukon	OEL STEL	20 mg/m³ (Al2O3)
Yukon	OEL TWA	30 mppcf (Al2O3)
		10 mg/m³ (Al2O3)
Chromium oxide (Cr2O3) (13		
USA ACGIH	ACGIH OEL TWA	0.05 mg/m³ 0.5 (Cr II & Cr III Compounds) 0.05 (Cr VI Water Soluble)
USA OSHA	OSHA PEL (TWA) [1]	1 mg/m³ (metal) 0.5 (Cr II & Cr III Compounds) 0.005 (Cr VI
		Compounds)
Quartz (14808-60-7)		
USA ACGIH	ACGIH OEL TWA	0.025 mg/m³ (respirable particulate matter)
USA ACGIH	ACGIH chemical category	A2 - Suspected Human Carcinogen
USA OSHA	OSHA PEL (TWA) [1]	50 μg/m³ (Respirable crystalline silica)
USA OSHA	OSHA PEL (TWA) [2]	(250)/(%SiO ₂ +5) mppcf TWA (respirable fraction)
		(10)/(%SiO ₂ +2) mg/m ³ TWA (respirable fraction)
		(For any operations or sectors for which the respirable
		crystalline silica standard, 1910.1053, is stayed or
		otherwise not in effect, See 20 CFR 1910.1000 TABLE Z-3)
USA NIOSH	NIOSH REL (TWA)	0.05 mg/m³ (respirable dust)
USA IDLH	IDLH	50 mg/m³ (respirable dust)
Alberta	OEL TWA	0.025 mg/m³ (respirable particulate)
British Columbia	OEL TWA	0.025 mg/m³ (respirable)
Manitoba	OEL TWA	0.025 mg/m³ (respirable particulate matter)
New Brunswick	OEL TWA	0.1 mg/m³ (respirable fraction)
Newfoundland & Labrador	OEL TWA	0.025 mg/m³ (respirable particulate matter)
Nova Scotia	OEL TWA	0.025 mg/m³ (respirable particulate matter)
Nunavut	OEL TWA	0.05 mg/m³ (respirable fraction (Silica - crystalline)
Northwest Territories	OEL TWA	0.05 mg/m³ (respirable fraction (Silica - crystalline)
Ontario	OEL TWA	0.1 mg/m³ (designated substances regulation-respirable
		fraction (Silica, crystalline)
Prince Edward Island	OEL TWA	0.025 mg/m³ (respirable particulate matter)
Québec	VEMP (OEL TWA)	0.1 mg/m³ (respirable dust)
Saskatchewan	OEL TWA	0.05 mg/m³ (Trydimite removed-respirable fraction (Silica -
W. J. s	OF TWA	crystalline (Trydimite removed))
Yukon	OEL TWA	300 particle/mL (Silica - Quartz, crystalline)
Iron oxide (Fe2O3) (1309-37		F / 3/ · 11 · · · · · · ·
USA ACGIH	ACCILI DEL TWA	5 mg/m³ (respirable particulate matter)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA OSHA	OSHA PEL (TWA) [1]	10 mg/m³ (fume)
		15 mg/m³ (total dust (Rouge)
LICA NIOCH	NIOCH BEL (TWA)	5 mg/m³ (respirable fraction (Rouge)
USA NIOSH	NIOSH REL (TWA)	5 mg/m³ (dust and fume)
USA IDLH	IDLH OF TWA	2500 mg/m³ (dust and fume) 5 mg/m³ (respirable)
Alberta	OEL STEL	5
British Columbia	OEL TWA	10 mg/m³ (fume)
British Columbia	OEL TWA	10 mg/m³ (regulated under Rouge-total particulate

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		(Rouge)
		3 mg/m³ (regulated under Rouge: particulate matter
		containing no Asbestos and <1% Crystalline silica-
		respirable particulate (Rouge)
		5 mg/m³ (dust and fume)
Manitoba	OEL TWA	5 mg/m³ (respirable particulate matter)
New Brunswick	OEL TWA	5 mg/m³ (particulate matter containing no Asbestos and
		<1% Crystalline silica, dust and fume)
		10 mg/m³ (regulated under Rouge-particulate matter
		containing no Asbestos and <1% Crystalline silica)
Newfoundland & Labrador	OEL TWA	5 mg/m³ (respirable particulate matter)
Nova Scotia	OEL TWA	5 mg/m³ (respirable particulate matter)
Nunavut	OEL STEL	10 mg/m³ (dust and fume)
- runavat	0223122	20 mg/m³ (regulated under Rouge)
Nunavut	OEL TWA	5 mg/m³ (dust and fume)
Ivaliavat	OLL TWA	10 mg/m³ (regulated under Rouge)
Northwest Territories	OEL STEL	10 mg/m² (dust and fume)
1401thwest leffitures	OLL SILL	20 mg/m³ (regulated under Rouge)
Northwest Territories	OEL TWA	5 mg/m³ (dust and fume)
Northwest Territories	OLLIWA	10 mg/m³ (dust and tume) 10 mg/m³ (regulated under Rouge)
Omtorio	OFL TWA	
Ontario	OEL TWA	5 mg/m³ (respirable particulate matter)
Prince Edward Island	OEL TWA	5 mg/m³ (respirable particulate matter)
Québec	VEMP (OEL TWA)	5 mg/m³ (dust and fume)
Saskatchewan	OEL STEL	10 mg/m³ (dust and fume)
		20 mg/m³ (regulated under Rouge)
Saskatchewan	OEL TWA	5 mg/m³ (dust and fume)
		10 mg/m³ (regulated under Rouge)
Yukon	OEL STEL	10 mg/m³ (fume)
		20 mg/m³ (regulated under Rouge)
Yukon	OEL TWA	5 mg/m³ (fume)
		30 mppcf (regulated under Rouge)
		10 mg/m³ (regulated under Rouge)
Titanium dioxide (13463-67-	7)	
USA ACGIH	ACGIH OEL TWA	10 mg/m ³
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA OSHA	OSHA PEL (TWA) [1]	15 mg/m³ (total dust)
USA NIOSH	NIOSH REL (TWA)	2.4 mg/m³ (CIB 63-fine)
		0.3 mg/m³ (CIB 63-ultrafine, including engineered
		nanoscale)
USA IDLH	IDLH	5000 mg/m ³
Alberta	OEL TWA	10 mg/m³
British Columbia	OEL TWA	10 mg/m³ (total dust)
		3 mg/m³ (respirable fraction)
Manitoba	OEL TWA	10 mg/m ³
New Brunswick	OEL TWA	10 mg/m³
Newfoundland & Labrador	OEL TWA	10 mg/m ³
Nova Scotia	OEL TWA	10 mg/m ³
Nunavut	OEL STEL	20 mg/m ³
Nunavut	OEL TWA	10 mg/m ³
Northwest Territories	OEL STEL	20 mg/m³
Northwest Territories	OEL TWA	10 mg/m ³
Ontario	OEL TWA	10 mg/m ³
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Prince Edward Island	OEL TWA	10 mg/m³
Québec	VEMP (OEL TWA)	10 mg/m³ (containing no Asbestos and <1% Crystalline
		silica-total dust)
Saskatchewan	OEL STEL	20 mg/m ³
Saskatchewan	OEL TWA	10 mg/m³
Yukon	OEL STEL	20 mg/m ³
Yukon	OEL TWA	30 mppcf
		10 mg/m³
Silica, amorphous (7631-86-	9)	
USA OSHA	OSHA PEL (TWA) [1]	6 mg/m³
USA OSHA	OSHA PEL (TWA) [2]	20 mppcf (80mg/m³/%SiO ₂)
USA NIOSH	NIOSH REL (TWA)	6 mg/m ³
USA IDLH	IDLH	3000 mg/m ³
Yukon	OEL TWA	300 particle/mL (as measured by Konimeter
		instrumentation (Silica)
		20 mppcf (as measured by Impinger instrumentation
		(Silica)
		2 mg/m³ (respirable mass (Silica)

8.2. Exposure Controls

Appropriate Engineering Controls: Suitable eye/body wash equipment should be available in the vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles.







Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State : Solid

Appearance : Light gray, granular

Odor : Odorless
Odor Threshold : Not available
pH : Not available
Evaporation Rate : Not available
Melting Point : Not available
Freezing Point : Not available
Boiling Point : Not available
Flash Point : Not available

Auto-ignition Temperature: Not availableDecomposition Temperature: Not availableFlammability (solid, gas): Not available

Lower Flammable Limit: Not availableUpper Flammable Limit: Not available

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Vapor Pressure: Not availableRelative Vapor Density at 20°C: Not availableRelative Density: Not availableSpecific Gravity: Not availableSolubility: Water: SolublePartition Coefficient: N-Octanol/Water: Not availableViscosity: Not available

SECTION 10: STABILITY AND REACTIVITY

- **10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- **10.2.** Chemical Stability: Stable under recommended handling and storage conditions (see section 7).
- 10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials.
- **10.5. Incompatible Materials:** Strong acids, strong bases, strong oxidizers.
- 10.6. Hazardous Decomposition Products: Thermal decomposition may produce: Metal oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Acute Toxicity (Oral): Not classified
Acute Toxicity (Dermal): Not classified
Acute Toxicity (Inhalation): Not classified
LD50 and LC50 Data: Not available
Skin Corrosion/Irritation: Not classified
Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation. **Symptoms/Injuries After Skin Contact:** Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes. **Symptoms/Injuries After Ingestion:** Ingestion may cause adverse effects.

Chronic Symptoms: Repeated or prolonged inhalation of dust particles may cause effects on the lungs. This may result in fibrosis

(pneumoconiosis).

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Magnesium oxide (MgO) (1309-48-4)		
LD50 Oral Rat	3870 mg/kg	
Aluminum oxide (Al2O3) (1344-28-1)		
LD50 Oral Rat	> 15900 mg/kg	
LC50 Inhalation Rat	> 2.3 mg/l/4h	
Chromium oxide (Cr2O3) (1308-38-9)		
LD50 Oral Rat	> 5000 mg/kg	
LC50 Inhalation Rat	> 5.41 mg/l/4h	
Manganese oxide (MnO) (1344-43-0)		
LC50 Inhalation Rat	> 5.35 mg/l/4h	
Quartz (14808-60-7)		
LD50 Oral Rat	> 5000 mg/kg	

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LD50 Dermal Rat	> 5000 mg/kg
Iron oxide (Fe2O3) (1309-37-1)	
LD50 Oral Rat	> 10000 mg/kg
Titanium dioxide (13463-67-7)	
LD50 Oral Rat	> 10000 mg/kg
LC50 Inhalation Rat	5.09 mg/l/4h
Silica, amorphous (7631-86-9)	
LD50 Oral Rat	7900 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg (No deaths)
Chromium oxide (Cr2O3) (1308-38-9)	
IARC Group	3
Quartz (14808-60-7)	
IARC Group	1
National Toxicology Program (NTP) Status	Known Human Carcinogens.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.
Iron oxide (Fe2O3) (1309-37-1)	
IARC Group	3
Titanium dioxide (13463-67-7)	
IARC Group	2B
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.
Silica, amorphous (7631-86-9)	
IARC Group	3

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Not classified.

Aluminum oxide (Al2O3) (1344-28-1)		
LC50 Fish 1	> 100 mg/l	
EC50 - Crustacea [1]	> 100 mg/l	
ErC50 algae	> 100 mg/l	
NOEC (Acute)	> 50 mg/l	
Chromium oxide (Cr2O3) (1308-38-9)		
LC50 Fish 1	> 10000 mg/l (Exposure time: 96 h - Species: Danio rerio [static])	
NOEC Chronic Fish	1000 mg/l (Species: Brachydanio rerio - Duration: 30 d)	
Iron oxide (Fe2O3) (1309-37-1)		
LC50 Fish 1	100000 mg/l (Exposure time: 96 h - Species: Danio rerio [static])	
Silica, amorphous (7631-86-9)		
LC50 Fish 1	5000 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])	
EC50 - Crustacea [1]	7600 mg/l (Exposure time: 48 h - Species: Ceriodaphnia dubia)	

12.2. Persistence and Degradability

SURE/CUT Velocity	
Persistence and Degradability	Not established.

12.3. Bioaccumulative Potential

SURE/CUT Velocity	
Bioaccumulative Potential	Not established.
Silica, amorphous (7631-86-9)	
BCF Fish 1	(no bioaccumulation expected)

12.4. Mobility in Soil Not available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

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SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT Not regulated for transport

14.2. In Accordance with IMDG Not regulated for transport

14.3. In Accordance with IATA Not regulated for transport

14.4. In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

Magnesium	ahiva	$(M_{\sigma}\Omega)$	(1309_48_4)	١
iviagnesium	oxiae	(INISO)	(1309-48-4)	,

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Aluminum oxide (Al2O3) (1344-28-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Subject to reporting requirements of United States SARA Section 313

SARA Section 313 - Emission Reporting 1 % (fibrous forms)

Chromium oxide (Cr2O3) (1308-38-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Manganese oxide (MnO) (1344-43-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Quartz (14808-60-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Iron oxide (Fe2O3) (1309-37-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Titanium dioxide (13463-67-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Silica, amorphous (7631-86-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. US State Regulations

California Proposition 65



WARNING: This product can expose you to Quartz, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Chemical Name (CAS No.)	Carcinogenicity	Developmental Toxicity	Female Reproductive Toxicity	Male Reproductive Toxicity
Quartz (14808-60-7)	Х	. Omercy	. Omency	Toxioley
Titanium dioxide (13463-67-7)	Х			

Magnesium oxide (MgO) (1309-48-4)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Massachusetts Right To Know List

Aluminum oxide (Al2O3) (1344-28-1)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Massachusetts Right To Know List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List

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Chromium oxide (Cr2O3) (1308-38-9)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Massachusetts Right To Know List

Quartz (14808-60-7)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Massachusetts Right To Know List

Iron oxide (Fe2O3) (1309-37-1)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Massachusetts Right To Know List

Titanium dioxide (13463-67-7)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Massachusetts Right To Know List

Silica, amorphous (7631-86-9)

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Massachusetts Right To Know List

15.3. Canadian Regulations

Magnesium oxide (MgO) (1309-48-4)

Listed on the Canadian DSL (Domestic Substances List)

Aluminum oxide (Al2O3) (1344-28-1)

Listed on the Canadian DSL (Domestic Substances List)

Chromium oxide (Cr2O3) (1308-38-9)

Listed on the Canadian DSL (Domestic Substances List)

Manganese oxide (MnO) (1344-43-0)

Listed on the Canadian DSL (Domestic Substances List)

Quartz (14808-60-7)

Listed on the Canadian DSL (Domestic Substances List)

Iron oxide (Fe2O3) (1309-37-1)

Listed on the Canadian DSL (Domestic Substances List)

Titanium dioxide (13463-67-7)

Listed on the Canadian DSL (Domestic Substances List)

Silica, amorphous (7631-86-9)

Listed on the Canadian DSL (Domestic Substances List)

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest

: 08/20/2021

Revision

Other Information

: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17.

GHS Full Text Phrases:

Carc. 1A	Carcinogenicity Category 1A	
Comb. Dust	Combustible Dust	
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1	
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	
H335	May cause respiratory irritation	
H350	May cause cancer	
H372	Causes damage to organs through prolonged or repeated exposure	

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

NA GHS SDS 2015 (Can, US)

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