

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Trade name : Black Diamond - Copper Slag

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Abrasives, Roofing Granules, and other aggregate uses
Restrictions on use : None known

1.4. Supplier's details

US Minerals, Inc.
18635 West Creek Drive
Tinley Park, IL 60477
T 708-623-1935

1.5. Emergency phone number

Emergency number : For Hazardous Materials or Dangerous Goods Incident Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night: 1-800-424-9300 (Toll Free, USA) / 703-527-3887 (Virginia, USA)
CCN 992764
Back-up Emergency Number: +1 703-741-5970 (Washington, DC)

SECTION 2 Hazard 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 1	H318	Causes serious eye damage.
Carcinogenicity, Category 1A	H350	May cause cancer (Inhalation).
Reproductive toxicity, Category 1A	H360	May damage fertility or the unborn child.
Specific target organ toxicity — Repeated exposure, Category 2	H373	May cause damage to organs (respiratory system) through prolonged or repeated exposure.

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

Causes skin irritation
Causes serious eye damage
May cause cancer (Inhalation).
May damage fertility or the unborn child
May cause damage to organs (respiratory system) through prolonged or repeated exposure

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According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Precautionary statements (GHS US)

: Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust.
Wash hands, forearms and face thoroughly after handling.
Wear protective clothing, eye and face protection, protective gloves.
If on skin: Wash with plenty of water.
If skin irritation occurs: Get medical advice or attention.
Take off contaminated clothing and wash it before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a poison center or doctor.
Get medical advice or attention if you feel unwell.
Store locked up.
Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Iron oxide	CAS-No.: 1309-37-1	40 – 60	STOT RE 2, H373 Aquatic Chronic 3, H412
Silicon Dioxide	CAS-No.: 60676-86-0	30 – 35	Not classified
Aluminum oxide	CAS-No.: 1344-28-1	4 – 15	Not classified
Magnesium oxide	CAS-No.: 1309-48-4	1 – 4	Not classified
Calcium oxide	CAS-No.: 1305-78-8	1 – 3	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335
Aluminum	CAS-No.: 7429-90-5	0.1 – 2.5	Flam. Sol. 1, H228 Water-react. 2, H261 Aquatic Acute 2, H401
Sulfur Trioxide	CAS-No.: 12210-38-7	1 – 2	Acute Tox. 3 (Inhalation:gas), H331 Skin Corr. 1, H314 STOT SE 3, H335
Titanium Dioxide	CAS-No.: 13463-67-7	0.1 – 0.8	Carc. 2, H351

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According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Name	Product identifier	%	GHS US classification
Quartz	CAS-No.: 14808-60-7	0.05 – 0.7	Carc. 1A, H350 STOT RE 1, H372
Lead compounds (as Pb)	CAS-No.: 7439-92-1	≤ 0.2	Carc. 2, H351 Repr. 1A, H360 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Comments : The concentration ranges are provided due to batch-to-batch variability.

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

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If the victim is unconscious : Lay in a stable manner on victim's side. Induce artificial respiration with mask fitted with one-way valve or other suitable device; not mouth-to-mouth. Call a POISON CENTER or doctor/physician.
First-aid measures after skin contact	: Take off contaminated clothing. Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately transport the casualty to an eye doctor / hospital. Continue rinsing during the transport with isotonic saline solution, alternatively with water.
First-aid measures after ingestion	: Rinse mouth out with water. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation	: If dust are formed : May cause respiratory irritation.
Symptoms/effects after skin contact	: Dust may cause irritation in skin folds or by contact in combination with tight clothing.
Symptoms/effects after eye contact	: If dust are formed : Risk of serious damage to eyes.
Symptoms/effects after ingestion	: May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic symptoms	: May cause cancer. May damage fertility or the unborn child. May cause damage to organs (respiratory system) through prolonged or repeated exposure.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard	: No fire hazard.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: Toxic fumes may be released. Carbon dioxide. Carbon monoxide. Metallic oxides.

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Safety Data Sheet

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. Use water spray or fog for cooling exposed containers. Use extinguishing media appropriate for surrounding fire. Move containers from fire area if it can be done without personal risk. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid all personal contact including breathing in the dust. Do not take actions involving personal risks. Stop leak if safe to do so. Absorb spillage to prevent material-damage. Notify authorities if product enters sewers or public waters.

For non-emergency personnel

- Protective equipment : Wear recommended personal protective equipment.
- Emergency procedures : Evacuate the danger area. If outdoors, move to an area upwind of the danger area. Do not breathe dust. If possible without taking personal risks, Remove ignition sources, ventilate area. Prevent other non-emergency personnel from entering the danger area.

For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
- Emergency procedures : Evacuate unnecessary personnel. Avoid dust formation. Ventilate the area thoroughly. Prevent runoff from entering drains, sewers or waterways.

- Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

- For containment : Using a clean shovel, put the material in a dry container and cover without compressing it. Avoid dust formation.
- Methods for cleaning up : Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal. Contaminated absorbent material may pose the same hazard as the spilt product. Decontaminate surfaces and equipment with water and detergent. Until a sufficient level of dilution is achieved, the decontamination water may pose the same hazards as the product. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.
- Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 8: "Exposure controls/personal protection", For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Do not breathe dust. Avoid contact with skin, eyes and clothing. Take precautionary measures against static discharge.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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Safety Data Sheet

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

7.2. Conditions for safe storage, including incompatibilities

Technical measures	: Keep in a cool, well-ventilated place away from heat.
Storage conditions	: Store in a cool, dry and well-ventilated area away from incompatible substances. Keep container closed when not in use.
Incompatible products	: Acids. Strong bases. Strong oxidizers.
Packaging materials	: Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Aluminum oxide (1344-28-1)

USA - OSHA - Occupational Exposure Limits

Local name	alpha-Alumina
OSHA PEL TWA	15 mg/m ³ (Total dust) 5 mg/m ³ (Respirable fraction)
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

Calcium oxide (1305-78-8)

USA - ACGIH - Occupational Exposure Limits

Local name	Calcium oxide
ACGIH OEL TWA	2 mg/m ³
Remark (ACGIH)	TLV® Basis: Eye, URT & Skin irr
Regulatory reference	ACGIH 2025

USA - OSHA - Occupational Exposure Limits

Local name	Calcium oxide
OSHA PEL TWA	5 mg/m ³
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

Titanium Dioxide (13463-67-7)

USA - ACGIH - Occupational Exposure Limits

Local name	Titanium dioxide
ACGIH OEL TWA	0.2 mg/m ³ (Nanoscale particles. R - Respirable particulate matter) 2.5 mg/m ³ (Finescale particles. R - Respirable particulate matter)
Remark (ACGIH)	TLV® Basis: LRT irr; pneumoconiosis. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2025

USA - OSHA - Occupational Exposure Limits

Local name	Titanium dioxide (Total dust)
OSHA PEL TWA	15 mg/m ³
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

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According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Magnesium oxide (1309-48-4)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Magnesium oxide
ACGIH OEL TWA	10 mg/m ³ (I - Inhalable particulate matter)
Remark (ACGIH)	TLV® Basis: Irr; Metal fume fever. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2025
USA - OSHA - Occupational Exposure Limits	
Local name	Magnesium oxide fume - Total Particulate
OSHA PEL TWA	15 mg/m ³
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
Quartz (14808-60-7)	
USA - OSHA - Occupational Exposure Limits	
Local name	Quartz (Total Dust) (Silica: Crystalline)
Remark (OSHA)	Table Z-3. For OSHA PEL (TWA) use formula: (30 mg/m ³ / (%SiO ₂ +2)) for mg/m ³ . CAS No. source: eCFR Table Z-1.
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts
Aluminum (7429-90-5)	
USA - OSHA - Occupational Exposure Limits	
Local name	Aluminum Metal (as Al)
OSHA PEL TWA	15 mg/m ³ (Total dust) 5 mg/m ³ (Respirable fraction)
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
Iron oxide (1309-37-1)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Iron oxide (Fe ₂ O ₃)
ACGIH OEL TWA	5 mg/m ³ (R - Respirable particulate matter)
Remark (ACGIH)	TLV® Basis: Pulmonary siderosis. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2025
USA - OSHA - Occupational Exposure Limits	
Local name	Iron oxide fume
OSHA PEL TWA	10 mg/m ³
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
Lead compounds (as Pb) (7439-92-1)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Lead and inorganic compounds, as Pb
ACGIH OEL TWA	0.05 mg/m ³

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According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Lead compounds (as Pb) (7439-92-1)	
Remark (ACGIH)	TLV® Basis: CNS & PNS impair; hematologic eff. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI
Regulatory reference	ACGIH 2025
USA - ACGIH - Biological Exposure Indices	
Local name	Lead and inorganic compounds
BEI	200 µg/l Parameter: Lead - Medium: blood - Sampling time: Not critical
Remark	Persons applying this BEI® are encouraged to counsel female workers of child-bearing age about the risk of delivering a child with a PbB over the current CDC reference value.
Regulatory reference	ACGIH 2025
Silicon Dioxide (60676-86-0)	
USA - OSHA - Occupational Exposure Limits	
Local name	Silica, fused, respirable dust
OSHA PEL TWA	20 mppcf
Remark (OSHA)	Table Z-3. For OSHA PEL (TWA): Use formula: (80 mg/m3 / (%SiO2)) for mg/m3. CAS No. source: eCFR Table Z-1.
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts
8.2. Appropriate engineering controls	
Appropriate engineering controls	: Ensure good ventilation of the work station. Use general ventilation, local exhaust ventilation, or process enclosure to keep the airborne concentrations below the permissible exposure limits. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Environmental exposure controls	: Avoid release to the environment.
8.3. Individual protection measures, such as personal protective equipment	
Personal protective equipment: Wear recommended personal protective equipment. Body protection should be chosen depending on activity and possible exposure.	
Materials for protective clothing: Personal protective equipment should be chosen according to national standards and in discussion with the supplier of the protective equipment. Wear protective clothing	
Hand protection: Protective gloves	
Eye protection: Chemical goggles or safety glasses	
Skin and body protection: Wear suitable protective clothing	
Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment. Use NIOSH approved respirator if ventilation is inadequate. SCBA for emergency responders. Must be used in accordance with an OSHA complaint respiratory protection program.	

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According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Device	Filter type	Condition
Half face Air-Purifying	Particle filter	High dust protection
Full face mask	Particle filter	High dust protection

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Solid
Appearance	: Solid. Granules.
Color	: Gray Black
Odor	: No data available
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: Not applicable
Explosion limits	: Not applicable
Particle characteristics	: No data available

Aluminum oxide

Particle characteristics	No data available
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Calcium oxide

Particle characteristics	No data available
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Titanium Dioxide

Particle characteristics	No data available
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Magnesium oxide

Particle characteristics	No data available
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Quartz

Particle characteristics	No data available
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According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Aluminum

Particle characteristics	No data available
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Iron oxide

Particle characteristics	No data available
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Sulfur Trioxide

Particle characteristics	No data available
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Lead compounds (as Pb)

Particle characteristics	No data available
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Silicon Dioxide

Particle characteristics	No data available
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9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Incompatible materials.

10.5. Incompatible materials

Acids. Bases. Oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates: Carbon dioxide. carbon monoxide. Metallic oxides.

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

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According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Aluminum oxide	
LD50 oral rat	> 5000 mg/kg body weight
Calcium oxide	
LD50 oral rat	> 2000 mg/kg body weight
LD50 dermal rat	> 2000 mg/kg body weight
LC50 Inhalation - Rat	> 6.04 mg/l air
Titanium Dioxide	
LD50 oral rat	> 5000 mg/kg body weight
Aluminum	
LD50 oral rat	> 15900 mg/kg body weight
LC50 Inhalation - Rat	> 0.888 mg/l air
Iron oxide	
LD50 oral	> 5000 mg/kg body weight
Lead compounds (as Pb)	
LD50 oral rat	> 2000 mg/kg body weight
LD50 dermal rat	> 2000 mg/kg body weight
LC50 Inhalation - Rat	> 5.05 mg/l air
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye damage.
Calcium oxide	
Additional information	Corrosive to rabbits on ocular application
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer (Inhalation).
Titanium Dioxide	
IARC group	2B - Possibly carcinogenic to humans
Quartz	
IARC group	1 - Carcinogenic to humans
National Toxicity Program (NTP) Status	Known Human Carcinogens
Iron oxide	
IARC group	3 - Not classifiable
Lead compounds (as Pb)	
IARC group	2B - Possibly carcinogenic to humans
National Toxicity Program (NTP) Status	Reasonably anticipated to be Human Carcinogen.

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According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Silicon Dioxide	
IARC group	3 - Not classifiable
Reproductive toxicity	: May damage fertility or the unborn child.
Aluminum oxide	
NOAEL (animal/male, F0/P)	1000 mg/kg body weight (rat, male)
Aluminum	
NOAEL (animal/male, F0/P)	1000 mg/kg body weight
STOT-single exposure	: Not classified
Sulfur Trioxide	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: May cause damage to organs (respiratory system) through prolonged or repeated exposure.
Aluminum oxide	
LOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.015 mg/l air
Calcium oxide	
NOAEL (oral, rat, 90 days)	1000 mg/kg body weight
Quartz	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
Aluminum	
LOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.05 mg/l air
NOAEL (subchronic, oral, animal/male, 90 days)	1034 mg/kg body weight
NOAEL (subchronic, oral, animal/female, 90 days)	1087 mg/kg body weight
Iron oxide	
LOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.2102 mg/l air
NOAEL (oral, rat, 90 days)	> 1000 mg/kg body weight
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	≥ 0.03 mg/l air
STOT-repeated exposure	May cause damage to organs (respiratory system) through prolonged or repeated exposure.
Aspiration hazard	: Not classified
Black Diamond - Copper Slag	
Viscosity, kinematic	Not applicable
Aluminum oxide	
Viscosity, kinematic	No data available
Calcium oxide	
Viscosity, kinematic	No data available
Titanium Dioxide	
Viscosity, kinematic	No data available

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According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Aluminum oxide	
Magnesium oxide	
Viscosity, kinematic	No data available
Quartz	
Viscosity, kinematic	No data available
Aluminum	
Viscosity, kinematic	No data available
Iron oxide	
Viscosity, kinematic	No data available
Sulfur Trioxide	
Viscosity, kinematic	No data available
Lead compounds (as Pb)	
Viscosity, kinematic	No data available
Silicon Dioxide	
Viscosity, kinematic	No data available

Symptoms/effects after inhalation : If dust are formed : May cause respiratory irritation.
Symptoms/effects after skin contact : Dust may cause irritation in skin folds or by contact in combination with tight clothing.
Symptoms/effects after eye contact : If dust are formed : Risk of serious damage to eyes.
Symptoms/effects after ingestion : May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic symptoms : May cause cancer. May damage fertility or the unborn child. May cause damage to organs (respiratory system) through prolonged or repeated exposure.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified.

Hazardous to the aquatic environment, long-term (chronic) : Not classified.

Aluminum oxide	
EC50 72h - Algae [1]	1.05 mg/l
EC50 72h - Algae [2]	0.2 mg/l
Calcium oxide	
LC50 - Fish [1]	50.6 mg/l
EC50 - Crustacea [1]	49.1 mg/l
EC50 72h - Algae [1]	184.57 mg/l
NOEC (chronic)	32 mg/l

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According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Titanium Dioxide	
EC50 - Other aquatic organisms [1]	> 100 mg/l
EC50 72h - Algae [1]	> 100 mg/l
LOEC (chronic)	5 mg/l

Aluminum	
EC50 72h - Algae [1]	1.05 mg/l
EC50 72h - Algae [2]	0.2 mg/l

Iron oxide	
EC50 - Crustacea [1]	> 100 mg/l
EC50 - Other aquatic organisms [1]	> 100 mg/l
EC50 72h - Algae [1]	> 20 mg/l

Lead compounds (as Pb)	
LC50 - Fish [1]	1170 µg/l
LC50 - Fish [2]	107 µg/l

12.2. Persistence and degradability	
Black Diamond - Copper Slag	
Persistence and degradability	Not established.
Aluminum oxide	
Persistence and degradability	Not rapidly degradable
Calcium oxide	
Persistence and degradability	Not rapidly degradable
Titanium Dioxide	
Persistence and degradability	Not rapidly degradable
Magnesium oxide	
Persistence and degradability	Not rapidly degradable
Quartz	
Persistence and degradability	Not rapidly degradable
Aluminum	
Persistence and degradability	Rapidly degradable
Iron oxide	
Persistence and degradability	Not rapidly degradable
Sulfur Trioxide	
Persistence and degradability	Not rapidly degradable

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Safety Data Sheet

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Lead compounds (as Pb)

Persistence and degradability	Not rapidly degradable
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Silicon Dioxide

Persistence and degradability	Not rapidly degradable
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12.3. Bioaccumulative potential

Black Diamond - Copper Slag

Bioaccumulative potential	Not established.
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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations. Comply with applicable regulations for solid waste disposal.
Additional information : Do not re-use empty containers.

SECTION 14 Transport information

In accordance with DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
Not regulated for transport			
14.2. Proper Shipping Name			
Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)			
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group			
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards			
		Not regulated	
No supplementary information available			

14.6. Transport in bulk

Not applicable

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Safety Data Sheet

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

14.7. Special precautions for user

DOT

Not regulated

TDG

Not regulated

IMDG

Not regulated

IATA

Not regulated

SECTION 15 Regulatory information

15.1. 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, except for:

Sulfur Trioxide	CAS-No. 12210-38-7	1 – 2%
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Contains chemical(s) subject to TSCA 12b export notification if product is shipped outside the U.S

Lead compounds (as Pb)	CAS-No. 7439-92-1	≤ 0.2%
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Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Aluminum oxide	CAS-No. 1344-28-1	4 – 15%
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Aluminum	CAS-No. 7429-90-5	0.1 – 2.5%
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Lead compounds (as Pb)	CAS-No. 7439-92-1	≤ 0.2%
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Lead compounds (as Pb) (7439-92-1)

Listed on EPA Hazardous Air Pollutant (HAPS)

Listed on EPA HAPs Chronic Dose Response Assessment List - Carcinogens

Listed on EPA HAPs Acute Dose Response Assessment List – Exposure limits

CERCLA RQ	10 lb
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15.2. International regulations

CANADA

Aluminum oxide (1344-28-1)

Listed on the Canadian DSL (Domestic Substances List)

Calcium oxide (1305-78-8)

Listed on the Canadian DSL (Domestic Substances List)

Titanium Dioxide (13463-67-7)

Listed on the Canadian DSL (Domestic Substances List)

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Safety Data Sheet

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Magnesium oxide (1309-48-4)

Listed on the Canadian DSL (Domestic Substances List)

Quartz (14808-60-7)

Listed on the Canadian DSL (Domestic Substances List)

Aluminum (7429-90-5)

Listed on the Canadian DSL (Domestic Substances List)

Iron oxide (1309-37-1)

Listed on the Canadian DSL (Domestic Substances List)

Sulfur Trioxide (12210-38-7)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

Lead compounds (as Pb) (7439-92-1)

Listed on the Canadian DSL (Domestic Substances List)

Silicon Dioxide (60676-86-0)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Aluminum oxide (1344-28-1)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Calcium oxide (1305-78-8)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Titanium Dioxide (13463-67-7)

Listed on IARC (International Agency for Research on Cancer)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Magnesium oxide (1309-48-4)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Quartz (14808-60-7)

Listed on IARC (International Agency for Research on Cancer)

Listed as carcinogen on NTP (National Toxicology Program)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

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Aluminum (7429-90-5)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Iron oxide (1309-37-1)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Lead compounds (as Pb) (7439-92-1)

Listed on IARC (International Agency for Research on Cancer)
Listed as carcinogen on NTP (National Toxicology Program)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on EPA HAPs Chronic Dose Response Assessment List - Carcinogens
Listed on EPA HAPs Acute Dose Response Assessment List – Exposure limits

Silicon Dioxide (60676-86-0)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. State regulations



WARNING:

This product can expose you to Titanium dioxide (airborne, unbound particles of respirable size), which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Component	State or local regulations
Aluminum oxide(1344-28-1)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List
Calcium oxide(1305-78-8)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List
Titanium Dioxide(13463-67-7)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List
Magnesium oxide(1309-48-4)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List
Aluminum (7429-90-5)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List
Iron oxide(1309-37-1)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List
Lead compounds (as Pb)(7439-92-1)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List
Silicon Dioxide(60676-86-0)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List

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SECTION 16 Other information

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Issue date : 5/13/2025

Full text of hazard classes and H-statements	
H228	Flammable solid
H261	In contact with water releases flammable gas
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H331	Toxic if inhaled
H335	May cause respiratory irritation
H350	May cause cancer.
H351	Suspected of causing cancer.
H360	May damage fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

Abbreviations and acronyms	
ACGIH	American Conference of Government Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	Chemical oxygen demand (COD)
CSA	Chemical safety assessment
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration

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Abbreviations and acronyms	
ED	Endocrine disrupting properties
EN	European Standard
EWC	European waste catalogue
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
N.O.S.	Not Otherwise Specified
OECD	Organization for Economic Co-operation and Development
OEL	Occupational Exposure Limit
OSHA	Occupational Safety Health Administration
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
PPE	Personal protection equipment
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TF	Technical function
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
TWA	Time Weighted Average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
UFI	Unique Formula Identifier

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.