

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 07/24/2026

Reviewed on 07/24/2026

1 Identification

- **Product identifier**
- **Trade name:** **SATANITE**
- **Other means of identification**
- **Article number:** 6106
- **Restrictions** For industrial use only
- **Application of the substance / the mixture** Refractory Material
- **Uses advised against**
Users should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
HarbisonWalker International Minerals, Inc.
2000 Park Lane Drive, Suite 400
Pittsburgh, PA 15275
412-375-6600
- **Information department:**
SDS@thinkHWI.com
+33 (0)2 59 60 31 14
www.thinkHWI.com
- **Emergency telephone number:** CHEMTREC 24 hour Emergency Number: 1-800-424-9300

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Carcinogenicity 1A

H350 May cause cancer. Route of exposure:
Inhalation.Specific target organ toxicity (repeated exposure) 1H372 Causes damage to the lung through
prolonged or repeated exposure. Route of
exposure: Inhalation.

- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**
Quartz (SiO₂)
CRISTOBALITE
- **Hazard statements**
H350 May cause cancer. Route of exposure: Inhalation.

(Contd. on page 2)

US

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 07/24/2026

Reviewed on 07/24/2026

Trade name: SATANITE

(Contd. of page 1)

H372 Causes damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalation.

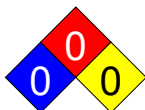
· **Precautionary statements**

- P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P260 Do not breathe dust/fume/gas/mist/vapors/spray.
 P264 Wash thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
 P308+P313 IF exposed or concerned: Get medical advice/attention.
 P314 Get medical advice/attention if you feel unwell.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Information pertaining to particular dangers for man and environment:**

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 0
 Fire = 0
 Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 0
 Fire = 0
 Reactivity = 0

· **Classification according to (d)(1)(ii) of § 1910.1200**

The SDS issuer does not object to the classifications provided by importers or manufacturers of precursor products.

· **Hazards not otherwise classified**

There are no adverse physical or health effects known that are not covered by the hazard classes of the Hazard Communications Standard.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

1344-28-1	aluminium oxide	≥15–≤30%
1332-58-7	Kaolin	≥5–≤10%
14808-60-7	Quartz (SiO ₂)	≥1–<10%
13463-67-7	Titanium dioxide	≥0.1–≤1%
14464-46-1	CRISTOBALITE	≥0.1–≤1%

· **Additional information:**

The exact chemical identity and/or percentage (concentration) of the composition has been withheld as a trade secret.

4 First-aid measures

· **Description of first aid measures**

· **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 07/24/2026

Reviewed on 07/24/2026

Trade name: SATANITE

(Contd. of page 2)

- **After inhalation:** Move to fresh air. Call a physician if symptoms develop or persist.
- **After skin contact:**
Wash off with soap and water. Get medical attention if irritation develops and persists.
- **After eye contact:** Rinse with water. Get medical attention if irritation develops and persists.
- **After swallowing:** Rinse mouth. Get medical attention if symptoms occur.
- **Information for doctor:** No further relevant information available.
- **Danger**
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:**
During heating or in case of fire poisonous gases are produced.
- **Protective equipment:** Mouth respiratory protective device.
- **Additional information**
- **Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
- **For non-emergency personnel** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about protection against explosions and fires:**
Keep respiratory protective device available.
- **Handling:**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a manner to minimize airborne dust.
Empty product packaging may contain residue. Do not reuse.
- **Information about storage in one common storage facility:**
Store in a manner to minimize airborne dust.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Storage class:** No further relevant information available.

8 Exposure controls/personal protection

· Control parameters

· Components with limit values that require monitoring at the workplace:

1344-28-1 aluminium oxide

PEL	Long-term value: 15*; 5** mg/m ³ *Total dust; ** Respirable fraction
REL	Long-term value: 10* 5** mg/m ³ as Al*Total dust**Respirable/pyro powd./welding f.
TLV	Long-term value: 1* mg/m ³ as Al; *as respirable fraction, A4

1332-58-7 Kaolin

PEL	Long-term value: 15* 5** mg/m ³ *total dust **respirable fraction
-----	---

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 07/24/2026

Reviewed on 07/24/2026

Trade name: SATANITE

(Contd. of page 3)

REL Long-term value: $10^* 5^{**} \text{ mg/m}^3$
 *total dust **respirable fraction

TLV Long-term value: 2^* mg/m^3
 E; respirable particulate matter, A4

14808-60-7 Quartz (SiO₂)

PEL Long-term value: 0.05^* mg/m^3
 *resp. dust; $30 \text{ mg/m}^3 / \% \text{ SiO}_2 + 2$

REL Long-term value: 0.05^* mg/m^3
 *respirable dust; See Pocket Guide App. A

TLV Long-term value: 0.025^* mg/m^3
 *respirable particulate matter, A2

13463-67-7 Titanium dioxide

PEL Long-term value: 15^* mg/m^3
 *total dust

REL See Pocket Guide App. A

TLV Long-term value: $0.2^* 2.5^{**} \text{ mg/m}^3$
 resp. fraction, *nanoscale, **finescale, A3

14464-46-1 CRISTOBALITE

PEL Long-term value: 0.05^* mg/m^3
 *resp. dust; $\frac{1}{2}$ value from resp.dust formulae Quartz

REL Long-term value: 0.05^* mg/m^3
 *respirable dust; See Pocket Guide App. A

TLV Long-term value: 0.025^* mg/m^3
 *respirable particulate matter, A2

Regulatory information

PEL: Guide to Occupational Exposure Values (OSHA PELs)
 REL: Guide to Occupational Exposure Values (NIOSH RELs)
 TLV: Guide to Occupational Exposure Values (TLV)

Ingredients with biological limit values:

The lists that were valid during the creation were used as basis.

Exposure controls**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal protective equipment:**General protective and hygienic measures:**

Observe any medical surveillance requirements.
 Keep away from foodstuffs, beverages and feed.
 Wash hands before breaks and at the end of work.
 Store protective clothing separately.
 Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.



Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 07/24/2026

Reviewed on 07/24/2026

Trade name: SATANITE

(Contd. of page 4)

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:



Tightly sealed goggles

Body protection: Wear appropriate thermal protective clothing, when necessary.

Limitation and supervision of exposure into the environment

Information on basic physical and chemical properties

General Information

Physical state	Solid
Color:	According to product specification
Odor:	Characteristic
Odor threshold:	Not determined
Melting point/Melting range:	Undetermined
Boiling point/Boiling range:	2,230 °C (3630 °F)
Flammability:	Not determined
Explosion limits:	
Lower:	Not determined
Upper:	Not determined
Flash point:	Not applicable
Auto igniting:	>370 °C (>698 °F)
Decomposition temperature:	Not determined
pH-value:	Not applicable
Viscosity:	
Kinematic:	Not applicable
Kinematic:	Not applicable
Solubility in / Miscibility with	
Water:	Soluble.
Partition coefficient (n-octanol/water):	Not determined
Vapor pressure:	Not applicable
Vapor pressure:	
Density:	Not determined
Relative density	Not determined
Vapor density	Not applicable
Particle characteristics	Not determined

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 07/24/2026

Reviewed on 07/24/2026

Trade name: SATANITE

(Contd. of page 5)

- **Other information**
- **Form:** Solid
- **Important information on protection of health and environment, and on safety.**
- **Ignition temperature:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Solvent separation test**
- **Organic solvents:**
- **VOC content:** 0.00 %
- **Solids content:**
- **Oxidizing properties** Not applicable.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.
- **Additional information:**
- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

1344-28-1 aluminium oxide

Oral	LD50	>5,000 mg/kg (rat)
------	------	--------------------

13463-67-7 Titanium dioxide

Oral	LD50	>20,000 mg/kg (rat)
Dermal	LD50	>10,000 mg/kg (rabbit)
Inhalative	LC50/4 h	>6.82 mg/l (rat)

- **Specific symptoms in biological assay:**
- **on the skin:** No irritant effect.
- **on the eye:**
Based on available data, the substance is not expected to cause skin or respiratory sensitization.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Specific target organ toxicity - single exposure**
Based on available data, the classification criteria are not met.
- **Specific target organ toxicity - repeated exposure** Not Applicable
- **Other information (about experimental toxicology):**
The product shows the following dangers according to internally approved calculation methods for preparations:
- **Interactive effects** No interactive effects between components are known.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

7631-86-9	SILICON DIOXIDE (AMORPHOUS)	3
14808-60-7	Quartz (SiO ₂)	1
13463-67-7	Titanium dioxide	2B
14464-46-1	CRISTOBALITE	1

(Contd. on page 7)

US

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 07/24/2026

Reviewed on 07/24/2026

Trade name: SATANITE

(Contd. of page 6)

· **NTP (National Toxicology Program)**14808-60-7 Quartz (SiO₂)

K

14464-46-1 CRISTOBALITE

K

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Alternative sources for toxicological information**

No non-standard sources for toxicological information where used.

12 Ecological information

· **Toxicity**· **Aquatic toxicity:** No further relevant information available.· **Persistence and degradability** No further relevant information available.· **Other information:** No further relevant information available.· **Other information:** No further relevant information available.· **Other adverse effects**· **General notes:** Not known to be hazardous to water.

13 Disposal considerations

· **Waste treatment methods**· **Recommendation:**

Since this product is used in several industries, no Waste Code can be provided by the supplier. The Waste Code should be determined in arrangement with your waste disposal partner or the responsible authority.

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Waste disposal key:**· **Recommendation:** Disposal must be made according to official regulations.· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· **UN-Number**· **DOT, IMDG, IATA** not regulated· **UN proper shipping name**· **DOT, IMDG, IATA** not regulated· **Transport hazard class(es)**· **DOT, IMDG, IATA**· **Class** not regulated· **Label**· **DOT, IMDG, IATA** not regulated· **Environmental hazards:** Not applicable· **Marine pollutant:** Not applicable· **Transport/Additional information:** Not applicable· **Poison inhalation hazard:** not regulated

US

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 07/24/2026

Reviewed on 07/24/2026

Trade name: SATANITE

(Contd. of page 7)

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture

- **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

1344-28-1 aluminium oxide

- **TSCA (Toxic Substances Control Act):**

All components have the value ACTIVE.

- **Significant New Use Rules (SNUR) under TSCA (40 CFR Part 721)**

None of the ingredients is listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

14808-60-7 Quartz (SiO₂)

13463-67-7 Titanium dioxide

14464-46-1 CRISTOBALITE

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value)**

1344-28-1	aluminium oxide	A4
1332-58-7	Kaolin	A4
14808-60-7	Quartz (SiO ₂)	A2
13463-67-7	Titanium dioxide	A4
14464-46-1	CRISTOBALITE	A2

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

14808-60-7 Quartz (SiO₂)

13463-67-7 Titanium dioxide

14464-46-1 CRISTOBALITE

- **OSHA-Ca (Occupational Safety & Health Administration)**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS08

- **Signal word Danger**

- **Hazard-determining components of labeling:**

Quartz (SiO₂)

CRISTOBALITE

(Contd. on page 9)

US

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 07/24/2026

Reviewed on 07/24/2026

Trade name: SATANITE

(Contd. of page 8)

- **Hazard statements**

H350 May cause cancer. Route of exposure: Inhalation.

H372 Causes damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalation.

- **Precautionary statements**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

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

P264 Wash thoroughly after handling.

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

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P314 Get medical advice/attention if you feel unwell.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Chemical safety assessment**

- **Additional classification according to Decree on Hazardous Materials:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

- **Other regulations, limitations and prohibitive regulations**

A Chemical Safety Assessment has not been carried out.

16 Other information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide and is not to be considered a warranty or quality specification and does not establish a legally binding contractual relationship. Actual conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. The suggested precautions and recommendations are based on recognized good work practices and experience as of the date of publication. They are not necessarily all-inclusive or fully adequate in every circumstance. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for one's own particular use and to provide appropriate warnings and safe handling procedures to handlers and users. The information provided relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. The information and recommendations are offered solely for the user's consideration and examination. It is the user's responsibility to satisfy itself that the product is suitable for the intended use. Except to the extent required by law, re-publication or retransmission of this document, in whole or in part, is not permitted.

- **Reasons for alterations**

- **Department issuing SDS:** Global Product Stewardship Team

- **Contact:** SDS@thinkHWI.com

- **Date of previous version** 07/23/2026

- **Version number of previous version:**

- **Date of preparation** 07/24/2026

- **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

(Contd. on page 10)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 07/24/2026

Reviewed on 07/24/2026

Trade name: SATANITE

(Contd. of page 9)

*LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**NIOSH: National Institute for Occupational Safety**OSHA: Occupational Safety & Health**TLV: Threshold Limit Value**PEL: Permissible Exposure Limit**REL: Recommended Exposure Limit**Carcinogenicity 1A: Carcinogenicity – Category 1A**Specific target organ toxicity (repeated exposure) 1: Specific target organ toxicity (repeated exposure) – Category 1***Sources**

- * Data compared to the previous version altered.**

US