SAFETY DATA SHEET



1. Identification

Product identifier VIBE-TITE TG

Other means of identification

Brand Code 850B

Recommended use For Industrial Use Only

Recommended restrictionsUsers 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. Avoid dry cutting, blasting,

or dust generation.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name HarbisonWalker International

Address 1305 Cherrington Parkway, Suite 100

Moon Township, Pennsylvania 15108 US

Telephone General Phone: 412-375-6600

Website www.thinkHWI.com Emergency phone number Not available.

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Carcinogenicity Category 1A

Reproductive toxicity Category 1

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement May cause cancer. May damage fertility or the unborn child.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Wear protective gloves/protective clothing/eye protection/face protection.

Response If exposed or concerned: Get medical advice/attention.

Storage Store in a manner to minimize airborne dust.

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

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental informationBoric acid: High doses have demonstrated effects on fertility, testes, and developmental effects

on the fetus in laboratory animals. Relevance of these findings to humans is uncertain.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Aluminium Oxide (Non-Fibrous	3)	1344-28-1	30 - 50
Mullite		1302-93-8	30 - 50
Amorphous Silica	Fumed Silica Silica, crystalline free	7631-86-9	10 - 25

Material name: VIBE-TITE TG

Chemical name	Common name and synonyms	CAS number	%
Kyanite		1302-76-7	2.5 - 10
Titanium Dioxide		13463-67-7	2.5 - 10
White Mineral Oil (Petroleum)		8042-47-5	2.5 - 10
Diiron Trioxide		1309-37-1	1 - 2.5
BORATES TETRASODIUM SALTS		12179-04-3	0.1 - 2.5
Cristobalite		14464-46-1	0.1 - 2.5
Quartz (SiO2)		14808-60-7	0.1 - 2.5
Other components below reportable	levels		< 0.5

Crystalline silica may be present at low concentrations; most of this is encapsulated in the coarse aggregate or as part of the clays or

4. First-aid measures

Move to fresh air. Call a physician if symptoms develop or persist. Inhalation

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists. Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists. Eve contact

Use fire-extinguishing media appropriate for surrounding materials.

Ingestion Rinse mouth. Get medical attention if symptoms occur. Dusts may irritate the respiratory tract, skin and eyes. Most important

symptoms/effects, acute and delayed

Indication of immediate

medical attention and special

treatment needed

General information

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Not available.

Specific hazards arising from

the chemical

Not applicable.

Special protective equipment and precautions for firefighters Not available.

6. Accidental release measures

Personal precautions. protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Ensure adequate ventilation. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Avoid the generation of dusts during clean-up. Collect dust using a vacuum cleaner equipped with HEPA filter. Stop the flow of material, if this is without risk.

Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Do not handle until all safety precautions have been read and understood. Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store in tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Cont Components	Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Cristobalite (CAS 14464-46-1)	PEL	0.05 mg/m3	Respirable dust.
Diiron Trioxide (CAS 1309-37-1)	PEL	10 mg/m3	Fume.
Quartz (SiO2) (CAS 14808-60-7)	PEL	0.05 mg/m3	Respirable dust.
Titanium Dioxide (CAS 13463-67-7)	PEL	15 mg/m3	Total dust.
White Mineral Oil (Petroleum) (CAS 8042-47-5)	PEL	5 mg/m3	Mist.
US. OSHA Table Z-3 (29 CFR 1910.1000		Value	Form
Components	Туре	Value	
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	5 mg/m3	Respirable fraction
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction
Amorphous Silica (CAS 7631-86-9)	TWA	0.8 mg/m3	
		20 mppcf	
Cristobalite (CAS 14464-46-1)	TWA	0.05 mg/m3	Respirable.
		1.2 mppcf	Respirable.
Diiron Trioxide (CAS 1309-37-1)	TWA	5 mg/m3	Respirable fraction
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction
Quartz (SiO2) (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.
Titanium Dioxide (CAS 13463-67-7)	TWA	5 mg/m3	Respirable fraction
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction
US. ACGIH Threshold Limit Values Components	Туре	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	1 mg/m3	Respirable fraction
BORATES TETRASODIUM	STEL	6 mg/m3	Inhalable fraction.

US. ACGIH	Threshold	Limit	Values
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Components	Type	Value	Form
-	TWA	2 mg/m3	Inhalable fraction.
Cristobalite (CAS 14464-46-1)	TWA	0.025 mg/m3	Respirable fraction.
Diiron Trioxide (CAS 1309-37-1)	TWA	5 mg/m3	Respirable fraction.
Kyanite (CAS 1302-76-7)	TWA	1 mg/m3	Respirable fraction.
Mullite (CAS 1302-93-8)	TWA	1 mg/m3	Respirable fraction.
Quartz (SiO2) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m3	
White Mineral Oil (Petroleum) (CAS 8042-47-5)	TWA	5 mg/m3	Inhalable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Туре	Value	Form
Amorphous Silica (CAS 7631-86-9)	TWA	6 mg/m3	
BORATES TETRASODIUM SALTS (CAS 12179-04-3)	TWA	1 mg/m3	
Cristobalite (CAS 14464-46-1)	TWA	0.05 mg/m3	Respirable dust.
Diiron Trioxide (CAS 1309-37-1)	TWA	5 mg/m3	Dust and fume.
Quartz (SiO2) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.
White Mineral Oil (Petroleum) (CAS 8042-47-5)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.

Biological limit values Exposure guidelines

No biological exposure limits noted for the ingredient(s).

Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. Occupational exposure to nuisance dust (total and respirable)

and respirable crystalline silica should be monitored and controlled.

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. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.

Individual protection measures, such as personal protective equipment

Chemical respirator with organic vapor cartridge, full facepiece, dust and mist filter. Eye/face protection

Skin protection

Wear appropriate chemical resistant gloves. **Hand protection**

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. Other

Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels Respiratory protection

exceeding the exposure limits.

Wear appropriate thermal protective clothing, when necessary. Thermal hazards









General hygiene considerations

Observe any medical surveillance requirements. 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.

9. Physical and chemical properties

Appearance

Physical state Solid. **Form** Powder. Not available. Color Odor Not available. **Odor threshold** Not available. Not available. Not available. Melting point/freezing point Initial boiling point and boiling Not available.

range

Not available. Flash point **Evaporation rate** Not available. Not available. Flammability (solid, gas) Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Flammability limit - upper

Not available.

Explosive limit - lower (%) Not available. Explosive limit - upper (%) Not available. Not available. Vapor pressure Vapor density Not available. Not available. Relative density

Solubility(ies)

Not available. Solubility (water) Not available. **Partition coefficient**

(n-octanol/water)

Auto-ignition temperature Not available. **Decomposition temperature** Not available. Not available. **Viscosity**

Other information

Not explosive. **Explosive properties** Not oxidizing. Oxidizing properties

10. Stability and reactivity

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

Material is stable under normal conditions. Chemical stability

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials.

Acids. Chlorine. Fluorine. Incompatible materials

Incompatibility is based strictly upon potential theoretical reactions between chemicals and may

not be specific to industrial application exposure.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Dust may irritate respiratory system. Prolonged inhalation may be harmful.

Skin contact Dust or powder may irritate the skin.

Eve contact Dust may irritate the eyes.

Expected to be a low ingestion hazard. Ingestion

Symptoms related to the physical, chemical and toxicological characteristics Dusts may irritate the respiratory tract, skin and eyes.

Information on toxicological effects

Not available. Acute toxicity

Prolonged skin contact may cause temporary irritation. Skin corrosion/irritation Serious eye damage/eye

irritation

Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

This product is not expected to cause skin sensitization. Skin sensitization

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica

inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art, worker

protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. May cause cancer. Occupational exposure to respirable dust and

respirable crystalline silica should be monitored and controlled.

IARC Monographs. Overall Evaluation of Carcinogenicity

Amorphous Silica (CAS 7631-86-9) 3 Not classifiable as to carcinogenicity to humans.

Cristobalite (CAS 14464-46-1) 1 Carcinogenic to humans.

Diiron Trioxide (CAS 1309-37-1) 3 Not classifiable as to carcinogenicity to humans.

Quartz (SiO2) (CAS 14808-60-7) 1 Carcinogenic to humans.

Titanium Dioxide (CAS 13463-67-7) 2B Possibly carcinogenic to humans.

White Mineral Oil (Petroleum) (CAS 8042-47-5) 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Cristobalite (CAS 14464-46-1) Cancer Quartz (SiO2) (CAS 14808-60-7) Cancer

US. National Toxicology Program (NTP) Report on Carcinogens

Cristobalite (CAS 14464-46-1) Known To Be Human Carcinogen.

Reasonably Anticipated to be a Human Carcinogen.

Quartz (SiO2) (CAS 14808-60-7) Known To Be Human Carcinogen.

Components in this product have been shown to cause birth defects and reproductive disorders in Reproductive toxicity

laboratory animals. May damage fertility or the unborn child.

Developmental effects

0 Quartz (SiO2) **Developmental effects - EU category** 0 Quartz (SiO2) **Embryotoxicity** 0 Quartz (SiO2) Reproductivity Quartz (SiO2) n

Specific target organ toxicity -

single exposure

Not classified.

Not classified. Specific target organ toxicity -

repeated exposure

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructionsThis product, in its present state, when discarded or disposed of, is not a hazardous waste

according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria

for hazardous waste.

Hazardous waste codeSince 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.

Waste from residues / unused

products

Not available.

Contaminated packaging Not available.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and

Not applicable.

the IBC Code

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200. All chemical substances in this product are listed on the TSCA

chemical substance inventory where required.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Cristobalite (CAS 14464-46-1)

Quartz (SiO2) (CAS 14808-60-7)

Cristobalite (CAS 14464-46-1)

Quartz (SiO2) (CAS 14808-60-7)

Lung effects

Lung effects

Cristobalite (CAS 14464-46-1) immune system effects Quartz (SiO2) (CAS 14808-60-7) immune system effects

Cristobalite (CAS 14464-46-1) kidney effects Quartz (SiO2) (CAS 14808-60-7) kidney effects

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Yes

chemical

Classified hazard Carcinogenicity categories Reproductive toxicity

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.	
Aluminium Oxide (Non-Fibrous)	1344-28-1	30 - 50	

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

California Proposition 65



WARNING: This product can expose you to chemicals including Titanium Dioxide: Titanium Dioxide: Titanium

Dioxide, which is known to the State of California to cause cancer. For more information go

to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Quartz (SiO2) (CAS 14808-60-7) Listed: October 1, 1988 Titanium Dioxide (CAS 13463-67-7) Listed: September 2, 2011

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

BORATES TETRASODIUM SALTS (CAS 12179-04-3)

Cristobalite (CAS 14464-46-1) Quartz (SiO2) (CAS 14808-60-7) Titanium Dioxide (CAS 13463-67-7)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

No *A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing

16. Other information, including date of preparation or last revision

05-08-2015 Issue date 06-02-2021 Revision date

Version # 02

country(s).

Disclaimer This information is based on our present knowledge on creation date. However, this shall not

constitute a guarantee for any specific product features and shall not establish a legally valid

contractual relationship.

Revision information This document has undergone significant changes and should be reviewed in its entirety.

Material name: VIBE-TITE TG

850B Version #: 02 Revision date: 06-02-2021 Issue date: 05-08-2015