

SAFETY DATA SHEET

1. Identification

Product identifier	TZ 150 PATCH	
Other means of identification		
Brand Code	8515	
Recommended use	For Industrial Use Only	
Recommended restrictions	Avoid dry cutting, blasting, or dust generation.	
Manufacturer/Importer/Supplier/I	Distributor information	
Manufacturer		
Company name	HarbisonWalker International a Member of Calderys	
Address	1305 Cherrington Parkway, Suite 100	
	Moon Township, Pennsylvania 15108 US	
Telephone	General Phone: 412-375-6600	
Website	www.thinkHWI.com	
Emergency phone number	CHEMTREC EMERGENCY 1-800-424-9300 US/CAN ONLY	

2. Hazard(s) identification

· · /		
Physical hazards	Not classified.	
Health hazards	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 1A
	Serious eye damage/eye irritation	Category 1
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		
Hazard symbol	None.	
Signal word	None.	
Hazard statement	Not available.	
Precautionary statement		
Prevention	Not available.	
Response	Not available.	
Storage	Not available.	
Disposal	Not available.	
Hazard(s) not otherwise classified (HNOC)	None known.	
Supplemental information	uranium and thorium (less than or equal to 26 total U + Th or 0.044 % w/w, equivalent to 110	trace quantities of naturally occurring radioactive 0 ppm uranium plus 180 ppm thorium = 440 ppm 0 pCi/g or less), and radium (less than or equal to laterial, namely uranium, thorium, and their decay red to as "NORM".

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Zircon		14940-68-2	69.42
Orthophosphoric Acid		7664-38-2	5.76
Quartz (SiO2)		14808-60-7	0.21

4. First-aid measures

Inhalation	Not available.
Skin contact	Not available.
Eye contact	Not available.
Ingestion	Not available.
Most important symptoms/effects, acute and delayed	Not available.

5. Fire-fighting measures

Suitable extinguishing media	Not available.
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	Not available.
Methods and materials for containment and cleaning up	Not available.
Environmental precautions	Not available.

7. Handling and storage

Precautions for safe handling	Not available.
Conditions for safe storage,	Not available.
including any incompatibilities	

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value	Form
Orthophosphoric Acid (CAS 7664-38-2)	PEL	1 mg/m3	
Quartz (SiO2) (CAS 14808-60-7)	PEL	0.05 mg/m3	Respirable dust.
Zircon (CAS 14940-68-2)	PEL	5 mg/m3	
US. OSHA Table Z-3 (29 CFR 1910.	1000)		
Components	Туре	Value	Form
Quartz (SiO2) (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.
US. ACGIH Threshold Limit Values	i		
Components	Туре	Value	Form
Orthophosphoric Acid (CAS 7664-38-2)	STEL	3 mg/m3	
	TWA	1 mg/m3	
Quartz (SiO2) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Zircon (CAS 14940-68-2)	STEL	10 mg/m3	
	TWA	5 mg/m3	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Туре	Value	Form
Orthophosphoric Acid (CAS 7664-38-2)	STEL	3 mg/m3	
	TWA	1 mg/m3	
Quartz (SiO2) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.
Zircon (CAS 14940-68-2)	STEL	10 mg/m3	
	TWA	5 mg/m3	
ological limit values	No biological exposure limits noted	for the ingredient(s).	
opropriate engineering ontrols	Not available.		
dividual protection measures,	such as personal protective equip	ment	
Eye/face protection	Not available.		
Skin protection			
Hand protection	Not available.		
Other	Not available.		
Respiratory protection	Not available.		
Thermal hazards	Not available.		
Physical and chemical p	roperties		
opearance			
Physical state	Solid.		
Form	Not available.		
Color	Not available.		
dor	Not available.		
dor threshold	Not available.		
4	Not available.		
elting point/freezing point	Not available.		
itial boiling point and boiling nge	Not available.		
ash point	Not available.		
aporation rate	Not available.		
ammability (solid, gas)	Not available.		
oper/lower flammability or expl	osive limits		
Explosive limit - lower (%)	Not available.		
Explosive limit - upper (%)	Not available.		
apor pressure	Not available.		
apor density	Not available.		
elative density	Not available.		
olubility(ies)			
Solubility (water)	Not available.		
artition coefficient -octanol/water)	Not available.		
uto-ignition temperature	Not available.		
ecomposition temperature	Not available.		
scosity	Not available.		
0. Stability and reactivity			
eactivity	Not available.		
nemical stability	Not available.		
ossibility of hazardous actions	Not available.		

Conditions to avoid	Not available.
Incompatible materials	Not available.
Hazardous decomposition	Not available.
products	

11. Toxicological information

U		
Information on likely routes of e	exposure	
Inhalation	Not available.	
Skin contact	Not available.	
Eye contact	Not available.	
Ingestion	Not available.	
Symptoms related to the physical, chemical and toxicological characteristics	Not available.	
Information on toxicological effe	ects	
Acute toxicity	Not available.	
Skin corrosion/irritation	Not available.	
Serious eye damage/eye irritation	Not available.	
Respiratory or skin sensitization	n	
Respiratory sensitization	Not available.	
Skin sensitization	Not available.	
Germ cell mutagenicity	Not available.	
Carcinogenicity		
IARC Monographs. Overall	Evaluation of Carcinogeni	city
Quartz (SiO2) (CAS 1480		1 Carcinogenic to humans.
OSHA Specifically Regulate		
Quartz (SiO2) (CAS 1480	J8-6U-7)	Cancer
US. National Toxicology Pro	ogram (NTP) Report on Ca	rcinogens
US. National Toxicology Pro Quartz (SiO2) (CAS 1480		-
US. National Toxicology Pro Quartz (SiO2) (CAS 1480 Reproductive toxicity		r cinogens Known To Be Human Carcinogen.
Quartz (SiO2) (CAS 1480	08-60-7)	-
Quartz (SiO2) (CAS 1480 Reproductive toxicity Developmental effects Quartz (SiO2)	08-60-7) Not available.	-
Quartz (SiO2) (CAS 1480 Reproductive toxicity Developmental effects Quartz (SiO2) Developmental effects	08-60-7) Not available.	Known To Be Human Carcinogen.
Quartz (SiO2) (CAS 1480 Reproductive toxicity Developmental effects Quartz (SiO2) Developmental effects Quartz (SiO2)	08-60-7) Not available.	Known To Be Human Carcinogen.
Quartz (SiO2) (CAS 1480 Reproductive toxicity Developmental effects Quartz (SiO2) Developmental effects Quartz (SiO2) Embryotoxicity Quartz (SiO2)	08-60-7) Not available.	Known To Be Human Carcinogen.
Quartz (SiO2) (CAS 1480 Reproductive toxicity Developmental effects Quartz (SiO2) Developmental effects Quartz (SiO2) Embryotoxicity Quartz (SiO2) Reproductivity	08-60-7) Not available.	Known To Be Human Carcinogen. 0 0 0
Quartz (SiO2) (CAS 1480 Reproductive toxicity Developmental effects Quartz (SiO2) Developmental effects Quartz (SiO2) Embryotoxicity Quartz (SiO2) Reproductivity Quartz (SiO2)	08-60-7) Not available. - EU category	Known To Be Human Carcinogen. 0 0
Quartz (SiO2) (CAS 1480 Reproductive toxicity Developmental effects Quartz (SiO2) Developmental effects Quartz (SiO2) Embryotoxicity Quartz (SiO2) Reproductivity	08-60-7) Not available. - EU category	Known To Be Human Carcinogen. 0 0 0
Quartz (SiO2) (CAS 1480 Reproductive toxicity Developmental effects Quartz (SiO2) Developmental effects Quartz (SiO2) Embryotoxicity Quartz (SiO2) Reproductivity Quartz (SiO2) Specific target organ toxicity -	08-60-7) Not available. - EU category	Known To Be Human Carcinogen. 0 0 0
Quartz (SiO2) (CAS 1480 Reproductive toxicity Developmental effects Quartz (SiO2) Developmental effects Quartz (SiO2) Embryotoxicity Quartz (SiO2) Reproductivity Quartz (SiO2) Specific target organ toxicity - single exposure Specific target organ toxicity -	08-60-7) Not available. - EU category Not available.	Known To Be Human Carcinogen. 0 0 0
Quartz (SiO2) (CAS 1480 Reproductive toxicity Developmental effects Quartz (SiO2) Developmental effects Quartz (SiO2) Embryotoxicity Quartz (SiO2) Reproductivity Quartz (SiO2) Specific target organ toxicity - single exposure Specific target organ toxicity - repeated exposure	08-60-7) Not available. - EU category Not available. Not available. Not available.	Known To Be Human Carcinogen. 0 0 0
Quartz (SiO2) (CAS 1480 Reproductive toxicity Developmental effects Quartz (SiO2) Developmental effects Quartz (SiO2) Embryotoxicity Quartz (SiO2) Reproductivity Quartz (SiO2) Specific target organ toxicity - single exposure Specific target organ toxicity - repeated exposure Aspiration hazard	08-60-7) Not available. - EU category Not available. Not available. Not available. Not available.	Known To Be Human Carcinogen. 0 0 0
Quartz (SiO2) (CAS 1480 Reproductive toxicity Developmental effects Quartz (SiO2) Developmental effects Quartz (SiO2) Embryotoxicity Quartz (SiO2) Reproductivity Quartz (SiO2) Specific target organ toxicity - single exposure Specific target organ toxicity - repeated exposure Aspiration hazard 12. Ecological information Ecotoxicity Persistence and degradability	 Not available. EU category Not available. Not available. Not available. Not available. Not available. Not available. 	Known To Be Human Carcinogen. 0 0 0
Quartz (SiO2) (CAS 1480 Reproductive toxicity Developmental effects Quartz (SiO2) Developmental effects Quartz (SiO2) Embryotoxicity Quartz (SiO2) Reproductivity Quartz (SiO2) Specific target organ toxicity - single exposure Specific target organ toxicity - repeated exposure Aspiration hazard 12. Ecological information Ecotoxicity Persistence and degradability Bioaccumulative potential	Not available. - EU category Not available. Not available. Not available. Not available. Not available. No ecotoxicity data noted Not available. Not available. Not available.	Known To Be Human Carcinogen. 0 0 0
Quartz (SiO2) (CAS 1480 Reproductive toxicity Developmental effects Quartz (SiO2) Developmental effects Quartz (SiO2) Embryotoxicity Quartz (SiO2) Reproductivity Quartz (SiO2) Specific target organ toxicity - single exposure Specific target organ toxicity - repeated exposure Aspiration hazard 12. Ecological information Ecotoxicity Persistence and degradability Bioaccumulative potential Mobility in soil	 Not available. EU category Not available. Not available. Not available. Not available. No ecotoxicity data noted Not available. Not available. 	Known To Be Human Carcinogen. 0 0 0
Quartz (SiO2) (CAS 1480 Reproductive toxicity Developmental effects Quartz (SiO2) Developmental effects Quartz (SiO2) Embryotoxicity Quartz (SiO2) Reproductivity Quartz (SiO2) Specific target organ toxicity - single exposure Specific target organ toxicity - repeated exposure Aspiration hazard 12. Ecological information Ecotoxicity Persistence and degradability Bioaccumulative potential	Not available. - EU category Not available. Not available. Not available. Not available. Not available. No ecotoxicity data noted Not available. Not available. Not available.	Known To Be Human Carcinogen. 0 0 0

13. Disposal considerations

Disposal instructions

Confirm disposal procedures with environmental engineer and local regulations.

Waste from residues / unused Not available. products

Contaminated packaging

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 Not available. Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

US federal regulations

Toxic Substances Control Act (TSCA)

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

Not available.

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Orthophosphoric Acid (CAS 7664-38-2)

SARA 304 Emergency release notification

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

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

```
Cancer
lung effects
immune system effects
kidney effects
```

Listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical	Yes
Classified hazard categories	Acute toxicity (any route of exposure) Skin corrosion or irritation Serious eye damage or eye irritation

SARA 313 (TRI reporting)

Not regulated.

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)

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Orthophosphoric Acid (CAS 7664-38-2) High priority

US state regulations

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

Orthophosphoric Acid (CAS 7664-38-2) Quartz (SiO2) (CAS 14808-60-7)

California Proposition 65

California Proposition 65 - CRT: Listed date/Carcinogenic substance

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

Listed: October 1, 1988

Rutile (TiO2) (CAS 1317-80-2)	Listed: September 2, 2011
Titanium Dioxide (CAS 13463-67-7)	Listed: September 2, 2011

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
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	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	No
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 country(s).

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

Issue date	10-18-2017
Revision date	11-13-2023
Version #	02
Disclaimer	Not available.
Revision information	Product and Company Identification: Product and Company Identification Composition / Information on Ingredients: Ingredients Toxicological Information: Toxicological Data