



SECTION 1: Identification of the substance/mixture and of the company/undertaking

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1.1. Product identifier			
Trade name or designation of the mixture	TZ 150 PATCH		
Registration number	-		
Synonyms	None.		
Brand Code	8515		
Issue date	09-April-2018		
Version number	01		
1.2. Relevant identified uses of	f the substance or mixture and	d uses advised against	
Identified uses	For Industrial Use Only		
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.		
1.3. Details of the supplier of t	he safety data sheet		
Supplier			
Company name	HarbisonWalker International		
Address	1305 Cherrington Parkway, Suite 100 Moon Township, PA 15108, USA United States		
Division			
Telephone	General Phone: CHEMTREC EMERGENCY US/CAN ONLY	412-375-6600 1-800-424-9300	
e-mail	sds@thinkHWI.com		
Contact person	HWI USA		
1.4. Emergency telephone number	Not available.		

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classificatior applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards			
Skin corrosion/irritation	1	Category 1A	H314 - Causes severe skin burns and eye damage.
Serious eye damage/eye irritation		Category 1	H318 - Causes serious eye damage.
Hazard summary	Causes seve	re skin burns and eye damage. O	ccupational exposure to the substance or mixture

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended



Signal word	Danger	
Hazard statements		
H314	Causes	
H318	Causes	
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Causes severe skin burns and eye damage. Causes serious eye damage.

may cause adverse health effects.

Precautionary statements Prevention

Hazard pictograms

P260 P264	Do not breathe vapour. Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
Response	
P301 + P330 + P331 P303 + P361 + P353 P304 + P340	IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338 P310 P363	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/doctor. Wash contaminated clothing before reuse.
Storage	
P405	Store locked up.
Disposal	
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
Supplemental label information	Bauxite Clays and Zircon Sands may contain trace quantities of naturally occurring radioactive uranium and thorium (less than or equal to 260 ppm uranium plus 180 ppm thorium = 440 ppm total U + Th or 0.044 % w/w, equivalent to 110 pCi/g or less), and radium (less than or equal to 120 pCi/g). Naturally Occurring Radioactive Material, namely uranium, thorium, and their decay products, including radium, is commonly referred to as "NORM".
	Users should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Overexposure to the respirable dust of crystalline silica (quartz or cristobalite, less than or equal to 5 microns in size) may lead to silicosis in humans, which is a progressive and irreversible lung disease. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.
2.3. Other hazards	None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Orthophosphoric acid	2.5 - 10	7664-38-2 231-633-2	-	015-011-00-6	#
Classification:	Skin Irrit. 2;H315, Eye	Irrit. 2;H319			В
Aluminium Oxide (Non-I	Fibrous) 0.1 - 1	1344-28-1 215-691-6	-	-	

Classification:

Other components below reportable levels 90 - 100

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List of abbreviations and symbols that may be used above

- #: This substance has been assigned Union workplace exposure limit(s).
- M: M-factor

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments

The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

4.1. Description of first aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control centre immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control centre immediately.

Ingestion	Call a physician or poison control centre immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
4.2. Most important symptoms and effects, both acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
4.3. Indication of any immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.
SECTION 5: Firefighting	measures
General fire hazards	Not available.

5.1. Extinguishing media Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Not available.
5.2. Special hazards arising from the substance or mixture	Not available.
5.3. Advice for firefighters Special protective equipment for firefighters	Not available.
Special fire fighting	Not available.

SECTION 6: Accidental release measures

procedures

6.1. Personal precautions, protective equipment and emergency procedures

	cours squipment and since generative	
For non-emergency personnel	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe vapour. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.	
For emergency responders	Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.	
6.2. Environmental precautions	Avoid discharge into drains, water courses or onto the ground.	
6.3. Methods and material for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.	
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.	
	Never return spills to original containers for re-use.	
6.4. Reference to other sections	For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.	
SECTION 7: Handling and	l storage	
7.1. Precautions for safe handling	Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Do not breathe vapour. Do not get in eyes, on skin, or on clothing. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.	
7.2. Conditions for safe storage, including any	Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).	

7.3. Specific end use(s) Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

incompatibilities

Occupational exposure limits

UK. EH40 Workplace Expo Components	Туре	Value	
Orthophosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3	
	TWA	1 mg/m3	
Zircon (CAS 14940-68-2)	STEL	10 mg/m3	
	TWA	5 mg/m3	
EU. Indicative Exposure L Components	imit Values in Directives 91/322/El Type	C, 2000/39/EC, 2006/15/EC, 2009/161/EU Value	
Orthophosphoric acid (CAS 7664-38-2)	STEL	2 mg/m3	
	TWA	1 mg/m3	
iological limit values	No biological exposure limits noted fo	r the ingredient(s).	
ecommended monitoring rocedures	Follow standard monitoring procedure	S.	
erived no effect levels DNELs)	Not available.		
redicted no effect oncentrations (PNECs)	Not available.		
xposure guidelines	be monitored and controlled. Occupational Exposure Limits are not Zirconium silicates (zircon sands) con radioactive uranium and thorium. Ov uranium and thorium may cause lung Measurements made by Dupont durin of the 5 mg/m3 OSHA PEL for respira	ist (total and respirable) and respirable crystalline silica s relevant to the current physical form of the product. cain trace amounts (106-120 pCi/g) of naturally occurring erexposure by inhalation to respirable dust containing cancer. Eye contact with the dust may cause eye irritati g the use of a similar mineral sand indicated the observa ble dust and/or the PEL for quartz ensures the user is be anium and thorium. No LD50 or LC50 can be found for z	ion. ince
2. Exposure controls			
ppropriate engineering ontrols	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates shoul 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. Eye wash facilities and emergency shower must be available when handling this product.		
ndividual protection measure	es, such as personal protective equi	pment	
General information		required. Personal protection equipment should be chosen discussion with the supplier of the personal protective	en
Eye/face protection	Wear safety glasses with side shields	(or goggles) and a face shield.	
Skin protection			
- Hand protection	Wear appropriate chemical resistant of	loves.	
- Other	Wear appropriate chemical resistant of	lothina.	
Respiratory protection	Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.		
Thermal hazards	Wear appropriate thermal protective of	lothing, when necessary.	

Hygiene measures

Environmental exposure controls

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.

Environmental manager must be informed of all major releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state	Solid.	
Form	Solid. Paste.	
Colour	Not available.	
Odour	Not available.	
Odour threshold	Not available.	
рН	Not available.	
Melting point/freezing point	Not available.	
Initial boiling point and boiling range	Not available.	
Flash point	Not available.	
Evaporation rate	Not available.	
Flammability (solid, gas)	Not available.	
Upper/lower flammability or e	xplosive limits	
Flammability limit - lower (%)	Not available.	
Flammability limit - upper (%)	Not available.	
Vapour pressure	Not available.	
Vapour density	Not available.	
Relative density	Not available.	
Solubility(ies)		
Solubility (water)	Not available.	
Solubility (other)	Not available.	
Partition coefficient (n-octanol/water)	Not available.	
Auto-ignition temperature	Not available.	
Decomposition temperature	Not available.	
Viscosity	Not available.	
Explosive properties	Not explosive.	
Oxidising properties	Not oxidising.	
9.2. Other information	No relevant additional information available.	

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidising agents. Incompatibility is based strictly upon potential theoretical reactions between chemicals and may not be specific to industrial application exposure.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects.	
Information on likely routes of exposure		
Inhalation	May cause irritation to the respiratory system.	
Skin contact	Causes severe skin burns.	
Eye contact	Causes serious eye damage.	
Ingestion	Causes digestive tract burns.	

SymptomsBurning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may
include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including
blindness could result.

11.1. Information on toxicological effects

Acute toxicityNot known.Skin corrosion/irritationCauses severe skin burns and eye damage.

Material name: TZ 150 PATCH

Serious eye damage/eye irritation	Causes serious eye damage.
Respiratory sensitisation	Due to partial or complete lack of data the classification is not possible.
Skin sensitisation	Due to partial or complete lack of data the classification is not possible.
Germ cell mutagenicity	Due to partial or complete lack of data the classification is not possible.
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. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled. Due to partial or complete lack of data the classification is not possible.
Reproductive toxicity	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - single exposure	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - repeated exposure	Due to partial or complete lack of data the classification is not possible.
Aspiration hazard	Due to partial or complete lack of data the classification is not possible.
Mixture versus substance information	No information available.
Other information	Not available.
SECTION 12: Ecological information	
12.1. Toxicity	Based on available data, the classification criteria are not met for hazardous to the aquatic environment.
12.2. Persistence and degradability	No data is available on the degradability of this product.

12.2. Persistence and degradability	No data is available on the degradability of this product.
12.3. Bioaccumulative potential	No data available.
Partition coefficient n-octanol/water (log Kow)	Not available.
Bioconcentration factor (BCF)	Not available.
12.4. Mobility in soil	No data available.
12.5. Results of PBT and vPvB assessment	Not available.
12.6. 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.

SECTION 13: Disposal considerations

13.1. Waste treatment methods		
Residual waste	Not available.	
Contaminated packaging	Not available.	
EU waste code	Not available.	
Disposal methods/information	This 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.	

SECTION 14: Transport information

ADR

14.1. - 14.6.: Not regulated as dangerous goods.

RID

14.1. - 14.6.: Not regulated as dangerous goods. **ADN**

ADN

14.1. - 14.6.: Not regulated as dangerous goods.

IATA

14.1. - 14.6.: Not regulated as dangerous goods.

IMDG

14.1. - 14.6.: Not regulated as dangerous goods.

14.7. Transport in bulkNot applicable.according to Annex II ofMarpol and the IBC Code

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex I Not listed.

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex II Not listed.

Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry

Not listed

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use Not regulated.

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work

Not listed.

Other EU regulations

 Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

 Not listed.

 Other regulations
 The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP

 Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

 National regulations
 Follow national regulation for work with chemical agents. Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended.

15.2. Chemical safety assessment

SECTION 16: Other information

List of abbreviations	Not available.
References	Not available.
Information on evaluation method leading to the classification of mixture	Not available.
Full text of any H-statements not written out in full under	
Sections 2 to 15	H315 Causes skin irritation. H319 Causes serious eye irritation.
Revision information	Product and Company Identification: Physical States Composition / Information on Ingredients: Ingredients Toxicological Information: Toxicological Data
Training information	Not available.
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.