

SAFETY DATA SHEET

1. Identification

Response

1. Identification			
Product identifier	INSWOOL FIBER TEXTILES		
Other means of identification			
Brand Code	4998, 7312, 4997, 988A, 958A, 4999, 4898, 960A		
Brand(s)	INSWOOL 3-PLY TWISTED ROPE * INSWOOL CERAMIC TAPE W/INCONEL * NSWOOL HIGH DENSITY ROPE * INSWOOL RCF CLOTH W/GLASS INSERT * INSWOOL RCF CLOTH W/INCONEL INSERT * INSWOOL ROUND BRAID * INSWOOL SQUARE BRAID * INSWOOL TAPE		
Recommended use	For Industrial Use Only		
Recommended restrictions	None known.		
Manufacturer/Supplier informati	on		
Manufacturer			
Company name Address	HarbisonWalker International 1305 Cherrington Parkway, Suite 100 Moon Township, Pennsylvania 15108 US		
Telephone	General Phone:	412-375-6600	
Website	www.thinkHWI.com		
Emergency phone number	CHEMTREC 24 HOUR EMERGENCY #	1-800-424-9300	
2. Hazard(s) identification			
Physical hazards	Not classified.		
Health hazards	Carcinogenicity	Category 2	
Environmental hazards	Not classified.		
OSHA defined hazards	Not classified.		
Label elements			
Signal word	Warning		
Hazard statement	Suspected of causing cancer.		
Precautionary statement			
Prevention	Do not handle until all safety precautions have been read and understood. Observe good		

Storage	Store in a dry place. 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 information	None.		
3. Composition/information on ingredients			
Mixtures			

industrial hygiene practices.

If concerned: Get medical advice/attention.

Chemical name	Common name and synonyms	CAS number	%
Aluminosilicate Refractory Ceramic Fiber	REFRACTORY CERAMIC FIBERS REFRACTORY CERAMIC FIBER (RCF) High Temperature Insulation Wool (HTIW) SYNTHETIC VITREOUS FIBERS (SVF) REFRACTORY CERAMIC FIBRES Refractories, fibers, aluminosilicate Man-Made Mineral Fiber (MMMF) Man-Made Vitreous Fiber (MMVF) Alumino Silicate Wool (ASW)	142844-00-6	90 - 100

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Composition comments	This product contains Refractory Ceramic Fibers (RCF) or an RCF wrap or mat. IARC has classified RCFs as a possible human carcinogen, Group 2B. This classification was based on sufficient evidence of carcinogenicity in animals and no available data in humans. NTP classified respirable RCFs as reasonably anticipated carcinogens. Recent industry ongoing epidemiology studies show the general health of workers in the RCF industry was similar to that of workers in other dusty work environments. There have been no reports of mesothelioma, and the lung cancer rate appears similar to background rates, but the number of workers with a long latency period are too few for definitive conclusions. There was a small number of employees with an increased risk of developing pleural plaques (shadows along the inside of the chest wall). These plaques, however, are not known to cause symptoms or disability. HWI recommends that safe handling methods are followed, including air monitoring in areas wherever the potential exists for airborne fibers, minimizing airborne exposures through use of NIOSH approved respirators, and wearing protective clothing, gloves, and eye protection. For additional information please visit www.htiwcoalition.org Please review the workplace guidelines for additional handling information.
4. First-aid measures	
Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.

Skin contact	vash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	If concerned: Get medical advice. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
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. Wear appropriate protective equipment and clothing during clean-up. For personal protection, see section 8 of the SDS. Wear a dust mask if dust is generated above exposure limits.
Methods and materials for containment and cleaning up	Stop the flow of material, if this is without risk. Following product recovery, flush area with water. 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 Minimize dust generation and accumulation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

8. Exposure controls/personal protection

Occupational exposure limits

US. NIOSH: Pocket Guide t Components	o Chemical Hazards Type	Value	Form
Aluminosilicate Refractory Ceramic Fiber (CAS 142844-00-6)	TWA	3 fibers/cm3	Dust.
		3 fibers/cm3 5 mg/m3 5 mg/m3	Fiber. Fiber, total fibers, total dust
Biological limit values	No biological exposure limits noted for th	e ingredient(s).	
Exposure guidelines	Recommended Exposure Guideline 0.5 I RCF in the U.S. OSHA's "Particulate Not 1910.1000, Subpart Z, Air Contaminants Fraction 5 mg/m3. The High Temperate comprehensive toxicology and epidemiol [see Section 11 for more details], consult conducted a thorough review of the RCF in a state-of-the-art quantitative risk asse OSHA PEL, HTIW has adopted a recommented 7400B. The manufacturers' REG through prudent exposure control and re- feasibility as determined by extensive ind an agreement with the U.S. Occupational OCCUPATIONAL EXPOSURE LEVELS evaluation of occupational exposure limit workplace is best performed, on a case-I	t Otherwise Regulated (PNOI] applies generally; Total Dus ure Insulation Wool Coalition logy studies to identify potent ted experts familiar with fiber -related scientific literature, a essment. Based on these effor mended exposure guideline, b is intended to promote occur duction and it reflects relative dustrial hygiene monitoring effor al Safety and Health Administ (OEL) Non-regulatory OEL	R)" standard [29 CFR st 15 mg/m3; Respirable (HTIW) has sponsored ial RCF-related health effects and particle science, and further evaluated the data orts and in the absence of an as measured under NIOSH pational health and safety e technical and economic forts undertaken pursuant to ration (OSHA). OTHER decisions also vary. The ve applicability to the
Appropriate engineering controls	General ventilation normally adequate.		
-	s, such as personal protective equipment		
Eye/face protection	If contact is likely, safety glasses with sid	le shields are recommended.	
Skin protection Hand protection	Use suitable protective (cotton or leather) gloves if risk of skin contac	t.
Other	Apron and long sleeves are recommended	ed.	
Respiratory protection	Use a NIOSH/MSHA approved respirato exceeding the exposure limits.	r if there is a risk of exposure	to dust/fume at levels
Thermal hazards	Wear appropriate thermal protective cloth	hing, when necessary.	
	Alwaya abaarya good naraanal hygiana r	manauraa, augh ag washing a	fter handling the material

General hygiene considerations

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	Solid- fiber; Rope. Strap. Woven fabric.
Color	Not available.
Odor	Not available.
Odor 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 exp	losive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
10. Stability and reactivity	
Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.

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

products

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.	
Skin contact	No adverse effects due to skin contact are expected.	
Eye contact	Direct contact with eyes may cause temporary irritation.	
Ingestion	Expected to be a low ingestion hazard.	
Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.	
Information on toxicological effe	octs	
Acute toxicity	Not available.	
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to cause 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	Suspected of causing cancer.	
Material name: INSWOOL FIBER TEX	(TILES	SI

IARC Monographs. Overall Evaluation of Carcinogenicity				
Aluminosilicate Refractory 142844-00-6)	y Ceramic Fiber (CAS 2B Possibly carcinogenic to humans.			
US. National Toxicology Pro	ogram (NTP) Report on Carcinogens			
Not available.				
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)				
Not listed.				
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.			
Specific target organ toxicity - single exposure	Not classified.			
Specific target organ toxicity - repeated exposure	Not classified.			
Aspiration hazard	Not an aspiration hazard.			
Chronic effects	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effe	cts.		
12. Ecological information	1			
Ecotoxicity	The product is not classified as environmentally hazardous. However, this does no possibility that large or frequent spills can have a harmful or damaging effect on the			
Persistence and degradability	No data is available on the degradability of this product.			
Bioaccumulative potential	No data available.			
Mobility in soil	No data available.			
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozor	e creation		

13. Disposal considerations

Disposal instructions	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.
Hazardous waste code	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.
Waste from residues / unused products	Not available.
Contaminated packaging	Not available.

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

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

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US federal regulations
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This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. Toxic Substances Control Act (TSCA) Section 12(b) - This product has been assigned a CAS number; however, it is an "article" under TSCA and therefore exempt from listing on the TSCA inventory.

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.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - No Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No chemical

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)

US state regulations

- US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100) Not listed.
- **US. Massachusetts RTK Substance List**

Aluminosilicate Refractory Ceramic Fiber (CAS 142844-00-6)

US. New Jersey Worker and Community Right-to-Know Act

Aluminosilicate Refractory Ceramic Fiber (CAS 142844-00-6)

US. Pennsylvania Worker and Community Right-to-Know Law

Aluminosilicate Refractory Ceramic Fiber (CAS 142844-00-6)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

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)	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)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	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

10-27-2015

Revision date Version #	08-04-2016 02
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.