

Version #: 05

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Trade name or designation of the mixture	INSWOOL-HP BULK; INSWOOL-HP BLANKET 4#, 6#, 8#, 10#; INSWOOL-HP BLANKET FOIL BACK; INSWOOL-HP MODULE CM; INSWOOL-HP TRIM
Registration number	-
Synonyms	None.
Brand Code	5830, 5826, 5827, 5828, 5824, 5829, 5831, 5835, 5825, 099C, 119C

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	For Industrial Use Only • Primary Use: Refractory Ceramic Fiber (RCF) materials are used primarily in industrial high temperature insulating applications. Examples include heat shields, heat containment, gaskets, expansion joints, industrial furnaces, ovens, kilns, boilers and other process equipment at applications up to 1400°C. RCF based products are not intended for direct sale to the general public. While RCFs are used in the manufacture of some consumer products, such as catalytic converter mats and wood burning stoves, the materials are contained, encapsulated, or bonded within the units. • Secondary Use: Conversion into wet and dry mixtures and articles (refer to section 8). • Tertiary Use: Installation, removal (industrial and professional) / Maintenance and service life (industrial and professional) (refer to section 8).
Uses advised against	Avoid dry cutting, blasting, or dust generation.

1.3. Details of the supplier of the safety data sheet

Supplier	
Company name	HarbisonWalker International a Member of Caldersys
Address	1305 Cherrington Parkway, Suite 100 Moon Township, PA 15108, USA United States
Division	
Telephone	General Phone: 412-375-6743
e-mail	sds@thinkHWI.com
Contact person	HWI USA
1.4. Emergency telephone number	CHEMTREC EMERGENCY 1-800-424-9300 US/CAN ONLY

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008 as amended**

Health hazards	
Carcinogenicity (inhalation)	Category 1B

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

Contains:	Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+ MgO+BaO) content less o
Hazard pictograms	None.
Signal word	Danger
Hazard statements	The mixture does not meet the criteria for classification.

Precautionary statements

Prevention	
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.

P280

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

Response

P308 + P313

IF exposed or concerned: Get medical advice/attention.

Storage

Not available.

Disposal

P501

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

Supplemental label information

None.

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
Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+ MgO+BaO) content less o	80 - 100	142844-00-6 -	01-2119488048-29-00XX	650-017-00-8	#

Classification: Carc. 1B;H350, Carc. 2;H351**SECTION 4: First aid measures****General information** Not available.**4.1. Description of first aid measures****Inhalation** Not available.**Skin contact** Not available.**Eye contact** Not available.**Ingestion** Not available.**4.2. Most important symptoms and effects, both acute and delayed** Not available.**4.3. Indication of any immediate medical attention and special treatment needed** Not available.**SECTION 5: Firefighting measures****General fire hazards** Not available.**5.1. Extinguishing media****Suitable extinguishing media** Not available.**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 procedures** Not available.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Not available.

For emergency responders Not available.

6.2. Environmental precautions Not available.

6.3. Methods and material for containment and cleaning up Not available.

6.4. Reference to other sections Not available.

SECTION 7: Handling and storage

7.1. Precautions for safe handling Not available.

7.2. Conditions for safe storage, including any incompatibilities Not available.

7.3. Specific end use(s) Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. TRK List, OEL Ordinance (GwV), BGI. II, no. 184/2001

Components	Type	Value	Form
Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less o (CAS 142844-00-6)	STEL	2000000 fibers/m ³	Fiber.

Belgium. Exposure Limit Values

Components	Type	Value	Form
Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less o (CAS 142844-00-6)	TWA	1000000 fibers/m ³	Fiber.

Bulgaria. OEL values of carcinogens and mutagens at work (Reg. 10/2003 on prot. from carcinogens and mutagens at work, Ann. 1), as amended

Components	Type	Value	Form
Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less o (CAS 142844-00-6)	TWA	0,3 fibers/cm ³	Fiber.

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value	Form
Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less o (CAS 142844-00-6)	TWA	1 fibers/cm ³	Respirable fraction.
		6 mg/m ³	Inhalable fraction.

Croatia. OELs (GVI). Regulation on Protection of Workers against Exposure to Dangerous Chemicals at Work, OELs and Biological Limit Values, Annex I (NN 91/2018), as amended

Components	Type	Value
Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less o (CAS 142844-00-6)	MAC	0,3 fibers/cm ³

Czech Republic. OELs. Government Decree 361

Components	Type	Value
Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less o (CAS 142844-00-6)	TWA	4 mg/m ³

Finland. Government Decree on Work-related Cancer Risks

Components	Type	Value	Form
Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less o (CAS 142844-00-6)	TWA	0,3 fibers/cm ³	Fiber.

Finland. Workplace Exposure Limits

Components	Type	Value	Form
Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less o (CAS 142844-00-6)	TWA	0,3 fibers/cm ³	Respirable.
		0,2 fibers/cm ³	Respirable.

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Components	Type	Value	Form
Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less o (CAS 142844-00-6)	VME	0,1 fibers/cm ³	Fiber.

Regulatory status: Regulatory binding (VRC)

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value	Form
Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less o (CAS 142844-00-6)	TWA	0,3 fibers/cm ³	Fibrous dust.

Ireland. Occupational Exposure Limits

Components	Type	Value	Form
Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less o (CAS 142844-00-6)	TWA	1 fibers/cm ³	Fiber.
		0,3 fibers/cm ³	Fiber.
		5 mg/m ³	Fiber.

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment

Components	Type	Value
Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less o (CAS 142844-00-6)	TWA	2 mg/m ³

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements

Components	Type	Value
Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less o (CAS 142844-00-6)	TWA	0,3 fibers/cm ³

Netherlands. OELs (binding)

Components	Type	Value
Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less o (CAS 142844-00-6)	TWA	0,3 fibers/cc

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value	Form
Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less o (CAS 142844-00-6)	TLV	0,1 fibers/cm ³	Fiber.

Poland. Maximum permissible concentrations and intensities of harmful factors in the work environment (Dz.U.Poz. 1286/2018, Annex 1)

Components	Type	Value	Form
Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less o (CAS 142844-00-6)	TWA	0,3 fibers/cm ³	Fiber.

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

Components	Type	Value	Form
Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less o (CAS 142844-00-6)	TWA	0,2 fibers/cm ³	Fiber.
		5 mg/m ³	Inhalable fraction.

Slovakia. OELs for carcinogens and mutagens. Regulation No. 46/2002 on carcinogenic and mutagenic substances

Components	Type	Value	Form
Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less o (CAS 142844-00-6)	TWA	0,3 fibers/cm ³	Fiber.

Spain. Occupational Exposure Limits Components

Type	Value	Form
TWA	0,3 fibers/cm3	Fiber.

Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na₂O+K₂O+CaO+MgO+BaO) content less o (CAS 142844-00-6)

EU. OELs, Directive 2004/37/EC on carcinogen and mutagens from Annex III, Part A Components

Type	Value
TWA	0,3 fibers/ml

Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na₂O+K₂O+CaO+MgO+BaO) content less o (CAS 142844-00-6)

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

Recommended monitoring procedures Not available.

Derived no effect levels (DNELs) Not available.

Predicted no effect concentrations (PNECs) Not available.

8.2. Exposure controls

Appropriate engineering controls Not available.

Individual protection measures, such as personal protective equipment

General information Not available.

Eye/face protection Not available.

Skin protection

- **Hand protection** Not available.

- **Other** Not available.

Respiratory protection Not available.

Thermal hazards Not available.

Hygiene measures Not available.

Environmental exposure controls Not available.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state Solid.

Form Pressed fibrous material panel

Colour Not available.

Odour Not available.

Melting point/freezing point Not available.

Boiling point or initial boiling point and boiling range Not available.

Flammability Not available.

Flash point Not available.

Auto-ignition temperature Not available.

Decomposition temperature	Not available.
pH	Not available.
Kinematic viscosity	Not available.
Solubility	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water) (log value)	Not available.
Vapour pressure	Not available.
Density and/or relative density	Not available.
Vapour density	Not available.
Particle characteristics	Not available.

9.2. Other information

9.2.1. Information with regard to physical hazard classes No relevant additional information available.

9.2.2. Other safety characteristics No relevant additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity	Not available.
10.2. Chemical stability	Not available.
10.3. Possibility of hazardous reactions	Not available.
10.4. Conditions to avoid	Not available.
10.5. Incompatible materials	Not available.
10.6. Hazardous decomposition products	Not available.

SECTION 11: Toxicological information

General information Not available.

Information on likely routes of exposure

Inhalation Not available.

Skin contact Not available.

Eye contact Not available.

Ingestion Not available.

Symptoms Not available.

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity	Not known.
Skin corrosion/irritation	Not available.
Serious eye damage/eye irritation	Not available.
Respiratory sensitisation	Not available.
Skin sensitisation	Not available.
Germ cell mutagenicity	Not available.

Carcinogenicity

France Mandatory OELs (VLEP): Carcinogen category

Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na₂O+K₂O+CaO+ MgO+BaO) content less o (CAS 142844-00-6) Fibres de céramique réfractaires classés comme cancérogènes

Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)

Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na₂O+K₂O+CaO+ MgO+BaO) content less o (CAS 142844-00-6)

IARC Monographs. Overall Evaluation of Carcinogenicity

Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na₂O+K₂O+CaO+ MgO+BaO) content less o (CAS 142844-00-6) 2B Possibly carcinogenic to humans.

Slovenia. CMR. Protection of workers from exposure to carcinogen and mutagen agents (ULRS 101/2005, as amended)

Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na₂O+K₂O+CaO+ MgO+BaO) content less o (CAS 142844-00-6) Carcinogenic, Category 1B.

Reproductive toxicity Not available.

Specific target organ toxicity - single exposure Not available.

Specific target organ toxicity - repeated exposure Not available.

Aspiration hazard Not available.

Mixture versus substance information Not available.

11.2. Information on other hazards

Endocrine disrupting properties Not available.

Other information Not available.

SECTION 12: Ecological information

12.1. Toxicity No toxicity data noted for the ingredient(s).

12.2. Persistence and degradability Not available.

12.3. Bioaccumulative potential Not available.

Partition coefficient n-octanol/water (log K_{ow}) Not available.

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil Not available.

12.5. Results of PBT and vPvB assessment Not a PBT or vPvB substance or mixture.

12.6. Endocrine disrupting properties Not available.

12.7. Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Not available.

Contaminated packaging Not available.

EU waste code Not available.

SECTION 14: Transport information

ADR

14.1. UN number Not regulated as dangerous goods.

14.2. UN proper shipping name Not regulated as dangerous goods.

14.3. Transport hazard class(es)

Class Not assigned.

Subsidiary risk -

Hazard No. (ADR) Not assigned.

Tunnel restriction code Not assigned.

14.4. Packing group Not assigned.
14.5. Environmental hazards No.
14.6. Special precautions for user Not assigned.

RID

14.1. UN number Not regulated as dangerous goods.
14.2. UN proper shipping name Not regulated as dangerous goods.
14.3. Transport hazard class(es)
Class Not assigned.
Subsidiary risk -
14.4. Packing group Not assigned.
14.5. Environmental hazards No.
14.6. Special precautions for user Not assigned.

ADN

14.1. UN number Not regulated as dangerous goods.
14.2. UN proper shipping name Not regulated as dangerous goods.
14.3. Transport hazard class(es)
Class Not assigned.
Subsidiary risk -
14.4. Packing group Not assigned.
14.5. Environmental hazards No.
14.6. Special precautions for user Not assigned.

IATA

14.1. UN number Not regulated as dangerous goods.
14.2. UN proper shipping name Not regulated as dangerous goods.
14.3. Transport hazard class(es)
Class Not assigned.
Subsidiary risk -
14.4. Packing group Not assigned.
14.5. Environmental hazards No.
14.6. Special precautions for user Not assigned.

IMDG

14.1. UN number Not regulated as dangerous goods.
14.2. UN proper shipping name Not regulated as dangerous goods.
14.3. Transport hazard class(es)
Class Not assigned.
Subsidiary risk -
14.4. Packing group Not assigned.
14.5. Environmental hazards
Marine pollutant No.
EmS Not assigned.
14.6. Special precautions for user Not assigned.

14.7. Maritime transport in bulk according to IMO instruments Not available.

SECTION 15: Regulatory information

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

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended
Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

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, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na₂O+K₂O+CaO+ MgO+BaO) content less o (CAS 142844-00-6)

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, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na₂O+K₂O+CaO+ MgO+BaO) content less o (CAS 142844-00-6)

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

Refractory Ceramic Fibres, Special Purpose Fibres, with the exception of those specified elsewhere in this Annex [Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na₂O+K₂O+CaO+ MgO+BaO) content less o (CAS 142844-00-6)

Other EU regulations

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

Not listed.

National regulations Not available.

15.2. Chemical safety assessment Not available.

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 statements, which are not written out in full under sections 2 to 15
H350 May cause cancer by inhalation.
H351 Suspected of causing cancer by inhalation.

Revision information None.

Training information Not available.