

Version 1.3 Revision Date 02/05/2016 Print Date 02/05/2016

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Trade name : InsulThin™ HT

Manufacturer or supplier's details

Company : Johns Manville Address : P.O. Box 5108

Denver, CO USA 80127

Telephone : +1 303-978-2000 8:00AM-5:00PM M-F Emergency telephone : 1-800-424-9300 (Chemtrec, in English)

number

Prepared by : productsafety@jm.com

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Skin irritation : Category 2

Eye irritation : Category 2A

GHS Label element

Hazard pictograms :



Signal word : Warning

Hazard statements : H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements : **Prevention:**

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ eye protection/ face protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

P321 Specific treatment (see supplemental first aid instructions

on this label).

P332 + P313 If skin irritation occurs: Get medical advice/

attention.

P337 + P313 If eye irritation persists: Get medical advice/

attention.

P362 Take off contaminated clothing and wash before reuse.

Other hazards

None known.

1 / 9 US/EN



	InsulThin™ HT	
Version 1.3	Revision Date 02/05/2016	Print Date 02/05/2016

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Microporous insulation

Hazardous components

Chemical Name	CAS-No.	Concentration (%)
Silica, amorphous, fumed	7631-86-9	>= 50 - < 70
Silica, amorphous, surface treated, fumed	67762-90-7	>= 30 - < 50
silicon carbide	409-21-2	>= 30 - < 50
Continuous Filament Glass Fibers	Not Assigned	>= 10 - < 20

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

If inhaled : If unconscious place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

In case of skin contact : If skin irritation persists, call a physician.

If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact : Remove contact lenses.

Immediately flush eye(s) with plenty of water.

Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

Most important symptoms and effects, both acute and

delayed

: None known.

SECTION 5. FIREFIGHTING MEASURES

Unsuitable extinguishing

media

: High volume water jet

Hazardous combustion

products

: No hazardous combustion products are known

Specific extinguishing

methods

: Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Further information : Standard procedure for chemical fires.

Use extinguishing measures that are appropriate to local

2/9 US/EN



Insultnin ···· n i	
Revision Date 02/05/2016	Print Date 02/05/2016

In aud Thin TM LIT

circumstances and the surrounding environment.

Special protective equipment

for firefighters

Version 1.3

: Wear self-contained breathing apparatus for firefighting if

necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.

Avoid dust formation. Avoid breathing dust.

Environmental precautions : Prevent further leakage or spillage if safe to do so.

Methods and materials for containment and cleaning up

: Pick up and arrange disposal without creating dust.

Sweep up and shovel.

Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against

fire and explosion

: Avoid dust formation. Provide appropriate exhaust ventilation

at places where dust is formed.

Advice on safe handling : Avoid formation of respirable particles.

Do not breathe vapours/dust. Avoid contact with skin and eyes. For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the

application area.

Dispose of rinse water in accordance with local and national

regulations.

Conditions for safe storage : Electrical installations / working materials must comply with

the technological safety standards.

Keep in a dry, cool place.

Materials to avoid : No materials to be especially mentioned.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Silica, amorphous, fumed	7631-86-9	TWA (Dust)	20 Million particles per cubic foot (Silica)	OSHA
		TWA (Dust)	80 mg/m3 /	OSHA



Version 1.3 Revision Date 02/05/2016 Print Date 02/05/2016

			%SiO2 (Silica)	
		TWA	6 mg/m3 (Silica)	NIOSH REL
silicon carbide	409-21-2	TWA (Respirable)	5 mg/m3	NIOSH REL
		TWA (total)	10 mg/m3	NIOSH REL
		TWA (total dust)	15 mg/m3	OSHA
		TWA (respirable fraction)	5 mg/m3	OSHA
		TWA	0.1 fibre/cm3	ACGIH
		TWA (Inhalable fraction)	10 mg/m3	ACGIH
		TWA (Respirable fraction)	3 mg/m3	ACGIH
		TWA (Total dust)	10 mg/m3	OSHA
		TWA (respirable dust fraction)	5 mg/m3	OSHA
Continuous Filament Glass Fibers	Not Assigned	TWA (Total dust)	10 mg/m3	ACGIH
		TWA (Total dust)	15 mg/m3	OSHA
		TWA (Respirable dust)	5 mg/m3	OSHA
		TWA (Respirable dust)	5 mg/m3	ACGIH

Personal protective equipment

Respiratory protection : When workers are facing concentrations above the exposure

limit they must use appropriate certified respirators.

Hand protection

Remarks : Protective gloves against mechanical abrasion.

Eye protection : Safety glasses

Wear face-shield and protective suit for abnormal processing

problems.

Skin and body protection : Long sleeved clothing

Hygiene measures : Handle in accordance with good industrial hygiene and safety

practice.

When using do not eat or drink. When using do not smoke.

Wash hands before breaks and at the end of workday.

Written instructions for handling must be available at the work

place.



	InsulThin™ HT	
Version 1.3	Revision Date 02/05/2016	Print Date 02/05/2016

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Glass Fiber Nonwoven, BLANKET

Colour : off-white

Odour : none

Odour Threshold : Not applicable

pH : Not applicable

Melting point/range : > 1,500 $^{\circ}$ C

Boiling point/boiling range : Not applicable

Flash point : Not applicable

Evaporation rate : Not applicable

Flammability (solid, gas) : No data available

Upper explosion limit : Not applicable

Lower explosion limit : Not applicable

Vapour pressure : Not applicable

Relative vapour density : Not applicable

Relative density : No data available

Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

: No data available

Auto-ignition temperature : No data available

Thermal decomposition : No data available

Viscosity, dynamic : No data available

Viscosity, kinematic : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : No decomposition if stored and applied as directed.

Possibility of hazardous : Stable under recommended storage conditions.

5 / 9 US/EN



	InsulThin™ HT	
Version 1.3	Revision Date 02/05/2016	Print Date 02/05/2016
reactions	No hazards to be specially mentioned. No decomposition if stored and applied as directed.	
Conditions to avoid	: No data available	
Incompatible materials	: Strong acids	
Hazardous decomposition products	: No hazardous decomposition produ	ucts are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute inhalation toxicity : Remarks: Temporary mechanical abrasion (itching) of skin,

eyes and respiratory tract may occur upon exposure to fibers or dust during handling of this product and cannot occur

unless there is direct contact.

Acute toxicity

Components:

Silica, amorphous, fumed:

Acute oral toxicity : LD50 (Rat): 3,160 mg/kg

Acute inhalation toxicity : No data available :

Acute dermal toxicity : No data available :

Skin corrosion/irritation

Product:

Remarks: Temporary mechanical abrasion (itching) of skin, eyes and respiratory tract may occur upon exposure to fibers or dust during handling of this product and cannot occur unless there is direct contact.

Skin corrosion/irritation

Components:

silicon carbide:

Result: Skin irritation

Serious eye damage/eye irritation

Product:

Remarks: Temporary mechanical abrasion (itching) of skin, eyes and respiratory tract may occur upon exposure to fibers or dust during handling of this product and cannot occur unless there is direct contact.

Serious eye damage/eye irritation

Components:

6/9 US/EN



Version 1.3 Revision Date 02/05/2016 Print Date 02/05/2016

silicon carbide: Result: Eye irritation

IARC No component of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

ACGIH Confirmed human carcinogen

silicon carbide 409-21-2

Suspected human carcinogen

OSHA No component of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

carcinogen by OSHA.

NTP No component of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82

Protection of Stratospheric Ozone - CAA Section 602 Class I

Substances

Remarks: This product neither contains, nor was

manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A +

B).

Additional ecological

information

: No data available

7 / 9 US/EN



	InsulThin™ HT	
Version 1.3	Revision Date 02/05/2016	Print Date 02/05/2016

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Disposal of residual product : Do not dispose of waste into sewer.

Do not contaminate ponds, waterways or ditches with

chemical or used container.

Send to a licensed waste management company.

Contaminated packaging : Empty containers should be taken to an approved waste

handling site for recycling or disposal.

Empty remaining contents.

Dispose of as unused product.

Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International transport regulations

These products are not classified as dangerous goods according to international transport regulations.

SECTION 15. REGULATORY INFORMATION

TSCA list

US. Toxic Substances Control Act (TSCA) Section : Not relevant 12(b) Export Notification (40 CFR 707, Subpt D)

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 : No chemicals in this material are subject to the reporting

requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with

known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).



Version 1.3 Revision Date 02/05/2016 Print Date 02/05/2016

California Prop 65 WARNING! This product contains a chemical known to the

State of California to cause cancer.

Crystalline silica 14808-60-7

JM has conducted industrial hygiene sampling to determine the potential for crystalline silica exposure while performing repetitive activities required during installation and handling of InsulThin. The monitoring results for crystalline silica were below the reporting limits for the analytical method (non-detect) and below both the OSHA permissible exposure limit (PEL) for crystalline silica of 0.1 mg/m3 and the American Conference of Governmental Industrial Hygienists (ACGIH) consensus threshold limit value (TLV)of 0.025 mg/m3. JM recommends that employers conduct their own site specific exposure assessments.

The components of this product are reported in the following inventories:

TSCA : On TSCA Inventory

DSL : All components of this product are on the Canadian DSL.

SECTION 16. OTHER INFORMATION

Further information

As produced, the magnesium silicate fibers included in this product are vitreous (glassy) materials which do not contain crystalline silica. Continued exposure to elevated temperatures can cause the vitreous magnesium-silicate (alkaline-earth-silicate) fibers to devitrify (become crystalline). Clinoenstatite is the first crystalline formation to occur at approximately 1472 \mathbb{C} (800°C). Clinoenstatite formation peaks at approximately 1832 \mathbb{C} (1000°C), after which Protoenstatite (compositionally the same as Clinoenstatite) begins to form. Crystalline phase silica (Cristobalite) formation is possible at temperatures of approximately 2192 \mathbb{C} (1200°C), however, the formation of crystalline silica is highly dependent on temperature, the duration of time that the fibers are exposed to high temperatures, fiber chemistry and/or the presence of fluxing agents. The formation of crystalline silica can only be confirmed through laboratory analysis of the "hot face" fiber.

Revision Date : 02/05/2016

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.