# High-Temperature Fiberglass Board, Blanket, and Marine Mechanical Equipment Insulation

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## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

| | | |
|---|---|---|
| Trade name | : | 1000 Series SPIN-GLAS®, 800 Series SPIN-GLAS®, 800 Series SPIN-GLAS® Ultra, Incombustible Hullboard, Incombustible MICROLITE®, Micro-Flex®, Micro-Flex® Ultra, Precipitator SPIN-GLAS® |

Manufacturer or supplier's details

| | | |
|---|---|---|
| Company | : | Johns Manville |
| Address | : | P.O. Box 5108<br>Denver, CO USA 80217-5108 |
| Telephone | : | +1-303-978-2000 |
| Emergency telephone number | : | 24-Hour Number: +1-800-424-9300 (CHEMTREC) |
| Company | : | Johns Manville Canada Inc. |
| Address | : | 5301 42 Avenue<br>Innisfail, AB Canada T4G 1A2 |
| Telephone | : | +1-303-978-2000 |
| Emergency telephone number | : | 24-Hour Number: +1-800-424-9300 (CHEMTREC) |

Recommended use of the chemical and restrictions on use

| | | |
|---|---|---|
| Recommended use | : | thermal and/or acoustic insulation |
| Restrictions on use | : | For professional users only. |
| Prepared by | : | productsafety@jm.com |

## SECTION 2. HAZARDS IDENTIFICATION

**GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Hazardous Products Regulations**

Not a hazardous substance or mixture.

**GHS label elements**

Not a hazardous substance or mixture.

**Other hazards**

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical nature**
Glass fiber product

**Hazardous components**

Non-hazardous according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Hazardous Products Regulations, when used as intended.

**Relevant ingredients**

| Chemical name | CAS-No. | Concentration (% w/w) |
|---|---|---|
| non-biopersistent (biosoluble) glass fibers | Not Assigned | >= 80 - <= 90 % |

| | | |
|---|---|---|
| cured urea-extended phenol-formaldehyde resin | Not Assigned | >= 10 - <= 20 % |

## SECTION 4. FIRST AID MEASURES

| | | |
|---|---|---|
| General advice | : | Handle in accordance with good industrial hygiene and safety practice. |
| If inhaled | : | Remove person to fresh air. If signs/symptoms continue, get medical attention. |
| In case of skin contact | : | In case of contact, flush skin with plenty of water for at least 5 minutes while removing contaminated clothing and shoes.<br>If skin irritation persists, call a physician.<br>Wash contaminated clothing before re-use. |
| In case of eye contact | : | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.<br>If easy to do, remove contact lens, if worn.<br>Protect unharmed eye.<br>If eye irritation persists, consult a specialist. |
| If swallowed | : | Rinse mouth with water to remove dust or fibers and drink plenty of water to help reduce irritation.<br>If symptoms persist, call a physician. |
| Most important symptoms and effects, both acute and delayed | : | 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.<br>Abrasion effects should subside after cessation of exposure. |
| Protection of first-aiders | : | If potential for exposure exists refer to Section 8 for specific personal protective equipment. |
| Notes to physician | : | Treat symptomatically. |

## SECTION 5. FIREFIGHTING MEASURES

| | | |
|---|---|---|
| Suitable extinguishing media | : | Carbon dioxide (CO2)<br>Foam<br>Dry powder<br>Water |
| Unsuitable extinguishing media | : | none |
| Specific hazards during firefighting | : | Under the influence of high temperatures, e.g. during a fire in the warehouse, decomposition products like carbon oxide may be released due to the low content of organic compounds. |
| Hazardous combustion products | : | carbon oxides<br>nitrogen oxides<br>Hydrocarbons |
| Specific extinguishing methods | : | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Special protective equipment for firefighters | : | Wear self-contained breathing apparatus for firefighting if necessary. |

## SECTION 6. ACCIDENTAL RELEASE MEASURES

| | | |
|---|---|---|
| Personal precautions, | : | Avoid dust formation. |

protective equipment and emergency procedures

Environmental precautions : Should not be released into the environment.

Methods and materials for containment and cleaning up : Clean up promptly by scoop or vacuum.
Pick up and arrange disposal without creating dust.

## SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : No special protective measures against fire required.

Advice on safe handling : Smoking, eating and drinking should be prohibited in the application area.
Minimize dust generation and accumulation.
Do not breathe vapours/dust.
Do not get in eyes or mouth or on skin.
For personal protection see section 8.

Conditions for safe storage : Keep in a dry, cool place.

Materials to avoid : No materials to be especially mentioned.

Further information on storage stability : Stable at normal ambient temperature and pressure.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Components with workplace control parameters**

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|---|---|---|---|---|
| Synthetic vitreous fibers, glass wool fibers | Not Assigned | TWA (fibers) | 1 fibers/cm3 | ACGIH |
| Fibrous glass dust | Not Assigned | TWA | 3 fibers/cm3 | NIOSH REL |
| | | TWA (total) | 5 mg/m3 | NIOSH REL |
| Inert or Nuisance Dust | Not Assigned | TWA (total dust) | 15 mg/m3 | OSHA |
| | | TWA (respirable fraction) | 5 mg/m3 | OSHA |
| Synthetic Vitreous Fibres (Man Made Mineral Fibres) – Glass wool fibres | Not Assigned | TWA | 1 fibers/cm3 | CA ON OEL |
| | | TWA | 1 fibers/cm3 | CA ON OEL |
| | | TWA | 1 fibers/cm3 | CA BC OEL |
| | | TWA (fibers) | 1 fibers/cm3 | CA AB OEL |
| Fibres-Artificial Vitreous Mineral Fibres | Not Assigned | TWAEV (fibers) | 2 fibers/cm3 | CA QC OEL |

As a member of the North American Insulation Manufacturers Association (NAIMA), Johns Manville subscribes to the NAIMA Product Stewardship Program (NPSP). Under the NPSP, Johns Manville recommends that exposures be limited to the NAIMA-OSHA voluntary Permissible

Exposure Limit (vPEL) of 1 f/cc TWA. The NPSP also includes work practice and respiratory protection recommendations for exposures over the vPEL. For more information, see NAIMA's Health and Safety Reference Library (website: http://insulationinstitute.org/tools-resources/resource-library/health-safety/) to find the Product Stewardship Program Pocket Folder (N052) and other Fact Sheets.

**Engineering measures** : During initial heat-up to operating temperatures above 177 °C (350 °F), thermal decomposition of the organic binder/sizing may occur.
Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines.
If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process.

**Personal protective equipment**

Respiratory protection : No personal respiratory protective equipment normally required.
During initial heat-up to operating temperatures above 177 °C (350 °F), thermal decomposition of the organic binder/sizing may occur.
Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines.
If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process.

Hand protection
Material : Protective gloves

Remarks : For prolonged or repeated contact use protective gloves.

Eye protection : Safety glasses with side-shields

Skin and body protection : Wear protective clothing, such as long-sleeved shirts and pants.
Remove and wash contaminated clothing before re-use.

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

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|---|---|---|
| Appearance | : | solid |
| Colour | : | colored |
| Odour | : | slight |
| Odour Threshold | : | No data available |
| pH | : | Not applicable |
| | : | Not applicable |
| | : | Not applicable |
| Flash point | : | Not applicable |
| Evaporation rate | : | Not applicable |

| | | |
|---|---|---|
| Flammability (solid, gas) | : | Not applicable |
| Upper explosion limit | : | Not applicable |
| Lower explosion limit | : | Not applicable |
| Vapour pressure | : | Not applicable |
| Relative vapour density | : | Not applicable |
| Relative density | : | No data available |
| Solubility(ies) | | |
| Water solubility | : | insoluble |
| Solubility in other solvents | : | No data available |
| Partition coefficient: n-octanol/water | : | Not applicable |
| Auto-ignition temperature | : | No data available |
| Thermal decomposition | : | Not applicable |
| Viscosity | | |
| Viscosity, dynamic | : | Not applicable |
| Viscosity, kinematic | : | Not applicable |

## SECTION 10. STABILITY AND REACTIVITY

| | | |
|---|---|---|
| Reactivity | : | No dangerous reaction known under conditions of normal use. |
| Chemical stability | : | Stable under normal conditions. |
| Possibility of hazardous reactions | : | None known. |
| Conditions to avoid | : | Exposure to moisture |
| Incompatible materials | : | hydrofluoric acid |
| Hazardous decomposition products | : | Thermal decomposition can lead to release of irritating gases and vapors. |

## SECTION 11. TOXICOLOGICAL INFORMATION

**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.

**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 (29 CFR 1910 Subpart Z, Toxic and Hazardous Substances).

**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: During initial heat-up to operating temperatures above 177 °C (350 °F), thermal decomposition of the organic binder/sizing may occur. Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process.

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. Abrasion effects should subside after cessation of exposure.

Remarks: Trace amounts of formaldehyde may be released when in contact with moisture, including humidity. This release is most prevalent in conditions of high heat and humidity.

## 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<br>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 | : | Due to the properties of the product, a hazard to the environment may not be expected. |

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal methods**

| | | |
|---|---|---|
| Waste from residues | : | Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations. |

## SECTION 14. TRANSPORT INFORMATION

### International transport regulations

Land transport
USDOT: Not classified as a dangerous good under transport regulations
TDG: Not classified as a dangerous good under transport regulations

Sea transport
IMDG: Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO: Not classified as a dangerous good under transport regulations

## SECTION 15. REGULATORY INFORMATION

### TSCA list

| | | |
|---|---|---|
| TSCA - 5(a) Significant New Use Rule List of Chemicals | : | Not relevant |
| U.S. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpart D) | : | Not relevant |

### 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 311/312 Hazards** | : | No SARA Hazards |
| **SARA 302** | : | This material does not contain any components with a section 302 EHS TPQ. |
| **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 112 (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).

**California Prop. 65**

⚠**WARNING:** This product can expose you to chemicals including formaldehyde, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

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

: Since these products are considered articles according to most of the international chemical regulations, they or their constituents need not be listed on the national inventories.

## SECTION 16. OTHER INFORMATION

**Further information**

Revision Date : 01/08/2025

**Full text of other abbreviations**

| | | |
|---|---|---|
| ACGIH | : | USA. ACGIH Threshold Limit Values (TLV) |
| CA AB OEL | : | Canada. Alberta, Occupational Health and Safety Code (table 2: OEL) |
| CA BC OEL | : | Canada. British Columbia OEL |
| CA ON OEL | : | Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act. |
| CA QC OEL | : | Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants |
| NIOSH REL | : | USA. NIOSH Recommended Exposure Limits |
| OSHA | : | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| ACGIH / TWA | : | 8-hour, time-weighted average |
| CA AB OEL / TWA | : | 8-hour Occupational exposure limit |
| CA BC OEL / TWA | : | 8-hour time-weighted average |
| CA ON OEL / TWA | : | Time-Weighted Average Limit (TWA) |
| CA QC OEL / TWAEV | : | Time-weighted average exposure value |
| NIOSH REL / TWA | : | Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek |
| OSHA / TWA | : | 8-hour time weighted average |

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 -

Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

**Disclaimer**

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