



Safety Data Sheet

Version: 1.0

Issue Date: 2019-12-20

1. Product and Company Identification

Product Name

TRYMER® Rigid Polyisocyanurate Insulation: 25-50, 200L, 250L, 350L, 400L, 1800, 2000XP, 2500, 3000, 4000, and 6000.

COMPANY IDENTIFICATION

Johns Manville
PO Box 5108
Denver, CO 80127
USA

Customer Information Number: +1 (303) 978-2000
Emergency Number: +1 (800) 424-9300 (CHEMTREC)
Product Information: ProductSafety@jm.com

Johns Manville Canada Inc.
5301 42 Avenue
Innisfail, AB T4G 1A2
Canada

Customer Information Number: +1 (303) 978-2000
Emergency Number: +1 (800) 424-9300 (CHEMTREC)
Product Information: ProductSafety@jm.com

Recommended Uses and Restrictions

Thermal insulation for industrial and commercial use.

2. Hazards Identification

Emergency Overview

Color: Gray

Physical State: Solid (bun/billet)

Odor: Odorless

Hazards of product:

Toxic fumes may be released in fire situations.

GHS classification in accordance with 29 CFR 1910.1200 (OSHA HCS 2012) and the Hazardous Products Regulations (WHMIS 2015)

Not a hazardous substance or mixture.

Potential Health Effects

Eye Contact: Solid or dust may cause irritation or corneal injury due to mechanical action. Fumes/vapor released during thermal operations such as hot-wire cutting may cause eye irritation.

Skin Contact: Essentially nonirritating to skin. Mechanical injury only.

Skin Absorption: Skin absorption is unlikely due to physical properties.

Inhalation: Dust may cause irritation to upper respiratory tract (nose and throat). Fumes or dusts generated from cutting or grinding operations may cause irritation of the upper respiratory tract and lungs.

Concentrations of the blowing agents anticipated incidental to proper handling are expected to be well below those which cause acute inhalation effects and below exposure guidelines.

Ingestion: Swallowing is unlikely because of the physical state. Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. May cause choking or blockage of the digestive tract if swallowed.

3. Composition Information

Component	CAS #	Amount
Modified Polyisocyanurate Rigid Cellular Polymer	Not applicable	≥85.0%
Hydrocarbon blowing agent(s)	Not applicable	≤10.0%
Tris(1-chloro-2-propyl) phosphate	13674-84-5	≤5.0%

4. First-Aid Measures

Eye Contact: Flush eyes with plenty of water; remove contact lenses after the first 1-2 minutes then continue flushing for several minutes. Only mechanical effects expected. If effects occur, consult a physician, preferably an ophthalmologist.

Skin Contact: Seek first aid or medical attention as needed.

Inhalation: Move person to fresh air; if effects occur, consult a physician.

Ingestion: If swallowed, seek medical attention. May cause gastrointestinal blockage. Do not give laxatives. Do not induce vomiting unless directed to do so by medical personnel.

Notes to Physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire Fighting Measures

Extinguishing Media: Water. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers.

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. Cool surroundings with water to localize fire zone. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires.

Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

Unusual Fire and Explosion Hazards: When product is stored in closed containers, a flammable atmosphere can develop. Mechanical cutting, grinding or sawing can cause formation of dusts. To reduce the potential for dust explosion, do not permit dust to accumulate. Rapid bursting of a multitude of cells such as might occur during compaction of product waste for disposal will release a flammable blowing agent which can lead to the development of a flammable atmosphere in inadequately vented equipment. This product contains a flame retardant to inhibit accidental ignition from small fire sources. This plastic foam product is combustible and should be protected from flames and other high heat sources. Dense smoke is emitted when burned without sufficient oxygen.

Hazardous Combustion Products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. In smoldering or flaming conditions, carbon monoxide, carbon dioxide and carbon are generated. Combustion products may include and are not limited to: Nitrogen oxides. Combustion products may include trace amounts of: Hydrogen cyanide. Hydrogen Halides. Aromatic hydrocarbons.

6. Accidental Release Measures

Steps to be Taken if Material is Released or Spilled: Contain spilled material if possible. Collect in suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.

Personal Precautions: Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental Precautions: Prevent from entering into soil, ditches, sewers, waterways and/or ground water. See Section 12, Ecological Information.

7. Handling and Storage

Exposure Limits

Component	List	Type	Value
Cyclopentane	ACGIH	TWA	600 ppm
Isopentane	ACGIH	TWA	1,000 ppm

General Handling

This material is combustible and should not be exposed to flame or other ignition sources. Refer to Exposure Controls and Personal Protection, Section 8 of the SDS. No smoking, open flames or sources of ignition in handling and storage area. Fabrication methods which involve cutting into this product may release the blowing agent(s) remaining in the cells. Provide adequate ventilation to assure localized concentrations in release areas are maintained below the lower flammable limit.

Other Precautions

Good housekeeping and controlling of dusts are necessary for safe handling of product.

Storage

Keep in a cool, well-ventilated place. Minimize sources of ignition, such as static build-up, heat, spark or flame. Flammable vapors may accumulate in some storage situations. During shipment, storage, installation, and use, this material should not be exposed to flame or other ignition sources.

8. Exposure Controls / Personal Protection

Concentrations of the blowing agents anticipated incidental to proper handling are expected to be well below those which cause acute inhalation effects and below exposure guidelines.

Personal Protection

Eye/Face Protection: Eye protection should not be necessary. For fabrication operations safety glasses are recommended. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

Skin Protection: No precautions other than clean body-covering clothing should be needed.

Hand protection: Use gloves to protect from mechanical injury. Selection of gloves will depend on the task.

Respiratory Protection: Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use a NIOSH-approved air-purifying respirator. In dusty or misty atmospheres, use a NIOSH-approved particulate respirator. The following should be effective types of air-purifying respirators: Particulate filter.

Ingestion: No precautions necessary due to the physical properties of the material.

Engineering Controls

Ventilation: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

9. Physical and Chemical Properties

Physical State	Solid (bun/billet)
Color	Tan
Odor	Odorless
Flash Point - Closed Cup	Not applicable
Flammable Limits In Air	Lower: Not applicable Upper: Not applicable
Autoignition Temperature	490 °C (914 °F) <i>ASTMD1929</i>

Vapor Pressure	Not applicable
Boiling Point (760 mmHg)	Not applicable
Vapor Density (air = 1)	Not applicable
Specific Gravity (water = 1)	0.02 - 0.05 <i>Estimated</i>
Freezing Point	Not applicable
Melting Point	> 150 °C (> 302 °F) <i>Estimated</i> , Decomposes
Solubility in Water	Insoluble in water
pH	Not applicable
Kinematic Viscosity	Not applicable

10. Stability and Reactivity

Stability/Instability

Thermally stable at typical use temperatures.

Conditions to Avoid

Avoid temperatures above 150 °C (302 °F). Exposure to elevated temperatures can cause product to decompose. Avoid direct sunlight.

Incompatible Materials

Avoid contact with strong oxidizers.

Hazardous Polymerization

Will not occur.

Thermal Decomposition

Decomposition products depend upon temperature, air supply and the presence of other materials. Toxic gases are released during decomposition.

11. Toxicological Information

Repeated Dose Toxicity

Repeated exposures to dusts of this material are not anticipated to result in systemic toxicity or permanent lung injury; however, excessive exposures may cause less severe respiratory effects.

12. Ecological Information

CHEMICAL FATE

Movement & Partitioning

No bioconcentration is expected because of the relatively high molecular weight (MW greater than 1000). In the terrestrial environment, material is expected to remain in the soil. In the aquatic environment, material is expected to float.

Persistence and Degradability

Surface photodegradation is expected with exposure to sunlight. No appreciable biodegradation is expected.

ECOTOXICITY

Not expected to be acutely toxic to aquatic organisms.

13. Disposal Considerations

Dispose of contents/container to an approved facility in accordance with local, regional, national and international regulations.

14. Transport Information

DOT (Bulk / Non-Bulk)

NOT REGULATED

TDG (Bulk / Non-Bulk)

NOT REGULATED

IMDG

NOT REGULATED

ICAO/IATA

NOT REGULATED

15. Regulatory Information

GHS classification in accordance with 29 CFR 1910.1200 (OSHA HCS 2012) and the Hazardous Products Regulations (WHMIS 2015)

Non-hazardous according to 29 CFR 1910.1200 (OSHA HCS 2012) and the Hazardous Products Regulations (WHMIS 2015), when used as intended.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Immediate (Acute) Health Hazard	No
Delayed (Chronic) Health Hazard	No
Fire Hazard	No
Reactive Hazard	No
Sudden Release of Pressure Hazard	No

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

This product does not require a warning under the California Safe Drinking Water and Toxic Enforcement Act (Proposition 65).

Toxic Substances Control Act (TSCA)

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30.

CEPA - Domestic Substances List (DSL)

All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

16. Other Information

Revision

Revision Date: 2019-12-20

Legend

TWA	Time Weighted Average
ACGIH	American Conference of Governmental Industrial Hygienists

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.