This SDS addresses PROVA® expanded polystyrene (EPS) products made from expandable polystyrene raw material containing a combustion modifier – i.e., fire retardant – per section 3

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identification: EPS Foam

1.2 Supplier Details: M-D PRO
5720 Ambler Drive
Mississauga / ON L4W 2B1

1.3 Emergency Contact Number: 1-800-565-6653 (this is not a 24-hour number)

2. HAZARDS IDENTIFICATION

2.1 GHS Classification: Non-hazardous as per GHS

2.2 GHS Label Elements: None

2.3 Signal Word: Not hazardous

2.4 Hazard Statements: Fumes from heated cutting tools may cause respiratory irritation
May cause slight skin irritation
Dust may cause eye irritation
Dust may cause respiratory irritation

2.5 Precautionary Statements:

2.5.1 Prevention: Wear NIOSH approved respiratory protection and eye protection when sawing and sanding.
Keep away from open flames / hot surfaces / heat / sparks

2.5.2 Response: IF DUST IS IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Should cease after removal of the product.
IF DUST IS INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
In case of fire: use dry chemical, foam, carbon dioxide, or water fog or spray

3. COMPOSITION / INFORMATION ON INGREDIENTS

CAS Number	*Content (W/W)*	*Chemical Name*
9003-53-6	98-99%	Polystyrene
109-66-0	<1.5%	n-Pentane*
78-78-4	<0.5%	Isopentane*
1195978-93-8	0-1%	Brominated Polymer

***Note: n-Pentane and isopentane are residual blowing agents and not intended to be part of the product. Residual pentane rapidly decreases with age.**

4. FIRST AID MEASURES

4.1 Eyes: If dust or particles become lodged in eyes, rinse with clean water. Obtain medical attention if condition is painful.

4.2 Skin: Contact is not expected to present a skin hazard. Wash exposed areas with mild soap and water. Consult physician if irritation persists.

4.3 Ingestion: Product is not expected to present significant ingestion hazard. If it does occur, watch the person for several days to make sure obstruction does not occur. Do not induce vomiting unless directed to by physician.

4.4 Inhalation: Move affected individual to non-contaminated air. Loosen tight clothing such as a collar, tie, belt or waistband to facilitate breathing. Seek immediate medical attention if the individual is not breathing, is unconscious or if any other symptoms persist.

5. FIRE FIGHTING MEASURES

5.1 Suitable extinguishing media:

Water Fog
Foam
Dry Chemical
ABC type Extinguisher

5.2 Specific Protective Equipment and Precautions for Fire-Fighters : Fire fighters should wear self-contained breathing apparatus (SCBA) and personal protective clothing (turn out gear) in a sustained fire.

5.3 Hazardous Combustion products: Styrene, oxides of carbon, and other toxic gases at elevated temperatures.

5.4 Conditions of Flammability: Pentane vapours may be emitted from freshly produced foam. Vapours can be ignited by heat, sparks, flames or other sources of ignition.

5.5 Flash Point: > 345 °C / 653 °F

5.6 Upper Explosive Limit: N/A

5.7 Lower Explosive Limit: N/A

5.8 Auto-ignition Temperature: 440 °C / 824 °F

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures: Good housekeeping practices should be observed. Material can be swept or picked up and placed in a suitable container for disposal.

6.2 Environmental Precautions: Small pieces, particles and dust can be blown by the wind and enter storm water systems and waterways. Although the product is not hazardous excess product can result in impairment of storm water systems and waterways. Prevent loss of material to the local environment through good housekeeping practices.

6.3 Methods and Materials for Containment and Cleaning up: Good housekeeping practices should be observed. Material can be swept or picked up and placed in a suitable container for disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling: Avoid all sources of ignition, do not smoke in areas where product is being stored or used. Product will dissolve in hydrocarbons, esters, aldehydes and amines. Avoid contact with these materials.

7.2 Conditions for safe storage: Store product away from open flame and other ignition sources. Store material in a dry place out of direct sunlight when possible. Have appropriate extinguishing capability in storage area(s) (e.g. sprinkler system, portable fire extinguishers)

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters:

	ACGIH TLV	
Chemical Name	**TWA**	**STEL**
n-Pentane	600 ppm	750 ppm
Isopentane	600 ppm	750 ppm
Polystyrene	Not applicable	Not applicable

8.2 Appropriate Engineering Controls: Provide sufficient general and/or local exhaust ventilation to maintain exposure below permissible personal exposure limit (PEL) or threshold limit value (TLV) for combustion products from heated cutting tools. Use local exhaust, where possible, in confined or enclosed spaces. Wear approved safety glasses/goggles and dust mask if mechanical fabrication is to take place.

8.3 Individual Protection Measures:

8.3.1 Respiratory Protection: None needed under normal handling conditions. Use approved dust mask when sawing or sanding. Use approved NIOSH respirator when the PEL or TLV for combustion products from heated cutting tools, sawing or sanding may be exceeded.

8.3.2 Skin Protection: None needed under normal handling conditions. Wear gloves and/or sleeves, if sensitivity noted.

8.3.3 Eye Protection: None needed under normal handling conditions. Uses approved safety glasses/goggles when sawing or sanding.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Rigid cellular foam blocks, boards and shapes
Odor:	Very slight hydrocarbon odour
Odor threshold:	N/A
pH:	N/A
Melting Point:	Softening begins at temperature > 85 °C (185 °F)
Boiling Point:	N/A (decomposes)
Flash Point:	> 345 °C / 653 °F (ASTM D1929)
Evaporation Rate:	N/A
VOL:	< 1%
Upper/Lower Flammability or Explosive Limit:	N/A
Vapor Pressure:	N/A
Vapor Density: (air = 1)	N/A
Specific Gravity:	< 1
Solubility:	Insoluble in water. Soluble in hydrocarbons, esters, aldehydes and amines
Partition Coefficient, n-Octanol/Water (log K_{ow}):	N/A
Auto-Ignition Temperature:	440 °C / 824 °F
Decomposition Temperature:	> 300 °C / 572 °F
Viscosity:	N/A
Other information:	N/A
Physical State:	Solid

10. STABILITY AND REACTIVITY

10.1	**Product Reactivity:**	Not reactive
10.2	**Chemical Stability:**	Normally stable
10.3	**Possibility of Hazardous Reactions:**	None expected
10.4	**Conditions to Avoid:**	Open flames, sparks, heat and other ignition sources

10.5 Incompatible Materials: Product will dissolve in hydrocarbons, esters, aldehydes and amines (organic solvents).

10.6 Hazardous Decomposition Products: Styrene, oxides of carbon, and other toxic gases at elevated temperatures

11. TOXICOLOGICAL INFORMATION

11.1 Acute Toxicity:

11.1.1 General Product Information:
This product has not been tested. Exposure to high levels of dusts may be irritating to the eyes. Skin/eye contact with molten or heated material may cause burns. Vapors/heated fumes may be irritating to the respiratory system.

11.1.2 Component Analysis – LD50/LC50
Pentane (109-66-0)
Inhalation LC50 Rat 364 g/m^3 4 h; Dermal LD50 Rabbit 3000 mg/kg; Oral LD50 Rat >2000 mg/kg

11.2 Potential Health Effects:

11.2.1 Skin Corrosion Property/Stimulativeness:
None anticipated under normal product handling conditions

11.2.2 Eye Critical Damage/Stimulativeness:
None anticipated under normal product handling conditions

11.2.3 Ingestion:
Not considered a likely route of exposure under normal product handling conditions.

11.2.4 Inhalation
Dust from this product may cause irritation to the respiratory system. Overexposure may be harmful

11.3 Respiratory Organs Sensitization/Skin Sensitization:
This product is not reported to have skin sensitization effects.

11.4 Generative Cell Mutagenicity:
This product is not reported to have mutagenic effects.

11.5 Carcinogenicity

11.5.1 General Product Information
This product is not reported to have carcinogenic effects.

11.5.2 Component Carcinogenicity
Polystyrene (9003-53-6)
IARC: Supplement 7 [1987]; Monograph 19 [1979] (Group 3 (not classifiable))

11.6 Reproductive Toxicity:
This product is not reported to have reproductive toxicity effects.

11.7 Specified Target Organ General Toxicity:

11.7.1 Single Exposure

Dust may cause respiratory irritation.

11.7.2 Repeated Exposure

This product is not reported to have any repeat exposure target organ toxicity effects.

11.8 Aspiration Respiratory Organs Hazard:

This product is not reported to have any aspiration hazard effects.

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

12.1.1 General Product Information

The information below is based on knowledge of the components and the ecotoxicity of similar products. Sewer/waterway obstruction: marine life may ingest beads, which may obstruct their digestive tract. Product is expected to be non-toxic, but small particles may have physical effects on aquatic and terrestrial organisms.

12.1.2 Component Analysis – Ecotoxicity – Aquatic Toxicity

Pentane (109-66-0)

Test & Species		**Conditions**
96 Hr LC50 Oncorhynchus mykiss		9.87 mg/L
96 Hr LC50 Pimephales promelas	11.59	mg/L
96 Hr LC50 Lepomis macrochirus		9.74 mg/L

12.2 Persistence/Degradability: This product has not been tested. Expected to be inherently non-biodegradable. Integrated environmental half-life expected to be > or = 100 days. Do not allow product to enter sewer or waterways.

12.3 Bioaccumulation: This product has not been tested. It is considered to have little potential for bioaccumulation or food chain concentration.

12.4 Mobility in Soil: No information available for this product.

13. DISPOSAL CONSIDERATIONS

13.1 General Product Information: Material, if discarded, is not expected to be a characteristic hazardous waste.

13.2 Disposal Instructions: Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations

14. TRANSPORT INFORMATION

Not regulated under Canadian TDG Regulations. Not regulated under US DOT Regulations.

15. REGULATORY INFORMATION

All ingredients and components for this product are on the Domestic Substances List (DSL).

The product is classified as WHMIS as non-hazardous.

This product has been classified according to the GHS hazard criteria and the SDS contains all ot eh information required by the GHS.

16. REGULATORY INFORMATION

SDS prepared for: **M-D PRO**
5720 Ambler Drive
Mississauga, Ontario, L4W 2B1
Canada

Preparation Date: September 18, 2019
Updated: September 18, 2019

Other Information:

The information contained herein is provided as a general reference only. M-D PRO believes the data set forth herein to be accurate and given in good faith. M-D PRO makes no guarantee or warranty and does not assume any liability with respect to the accuracy or completion of such information or of the product results in any specific instance, and hereby expressly disclaims any implied warranties of merchantability of fitness for a particular purpose, or any other warranties or representations, whatsoever, expressed or implied.