

## COMFORT GUARD

Spray Rigid Polyurethane Foam Combination Polyether for Roof, Industrial Pipe join and Floor

### DESCRIPTION

**COMFORT GUARD** is a Roof, Industrial Pipe join and Floor Insulation series with combination polyether of sprayed rigid polyurethane foam, it is specially used and can be applied for roofing insulation. It forms polyurethane rigid foam with Isocyanate (PM-200) through polyurethane spraying equipment. The resulting polyurethane foam has the following characteristics:

- 0 ODP, low GWP
- Strong adhesion, convenient on constructions, and no joints
- Low thermal conductivity, low water absorption, and good dimensional stability
- Long-lasting

### TYPICAL PHYSICAL PROPERTIES

Physical Properties	Test Standard	Unit	Technical Parameter
Apparent Core Density	ASTM D 1622	lb/ ft <sup>3</sup>	3.0
Compressive Strength	ASTM D1621-16	kPa	250
Tensile Strength	ASTM D1623-17	kPa	281
Surface Burning Characteristics (Flame Spread Index)	CAN/ULC-S102		350
Initial thermal conductivity (2 inch)	ASTM C518	RSI	2.32
Closed Porosity	ASTM D 6226	%	94
Water Absorption	ASTM D2842	%	1.5
Dimensional Stability (6 days after foaming)	ASTM D2126-15	-25°C	≤±1
		80°C	≤±1

Special Note: The values provided above are typical test values, and the specific data may vary slightly due to environmental and other conditions. For our company's products, the listed data are not legally binding in any way.

#### Precautions for use

- ✓ The thickness of single-layer spraying shall not exceed 50mm. If the thickness of the single-layer spray is too thick, it may cause the foam to combust, and the degradation of the foam performance may occur.
- ✓ It is recommended to spray the next layer of polyurethane when the internal spray foam temperature is lower than 25°C, and the maximum spray thickness does not exceed 203mm within 24 hours.
- ✓ Like any other spray foam, **COMFORT GUARD** spray foam is flammable, it must be installed with appropriate fire resistance materials by following building code.
- ✓ The service temperature of **COMFORT GUARD** is -60 to 80°C.
- ✓ The recommended storage temperature of **COMFORT GUARD** is 15-25°C.

### CONSTRUCTION GUIDE

Comfort Guard	Ambient Temperature	Device Temperature (Reference use)	Minimum Spray Pressure
Summer	10-35°C	35-41°C	5516kPa (800 psi)

**COMFORT GUARD**: PM200=1:1 (Volume Ratio)

Foaming equipment: Polyurethane Rigid Foam Spraying Machine

## LIQUID COMPONENT PROPERTIES

	Combined Polyether	Isocyanate
Product Name	Comfort Guard	PM200
Appearance of Liquid	Beige Liquid	Yellow Liquid
Density at 25°C	1.10 ±0.10 g/cm <sup>3</sup>	1.22-1.25 g/cm <sup>3</sup>
Viscosity at 25°C	400±200cps	200±50cps
Shelf Life at 25°C	12 months	12 months

## REACTIVE PROFILE

CREAM TIME	GEL TIME	RISE TIME
0-1 seconds	2-3 seconds	4-6 seconds

## PACKAGING SPECIFICATIONS

225KG/drum, galvanized, Milky White Drum (23KG /drum weight).

### Safety Precautions

Direct contact with the combined polyether type **COMFORT GUARD**, it can cause moderate eye irritation and minor skin irritation. It can cause skin allergies. Repeated inhalation of high concentrations of volatile gas will cause respiratory allergies, and you should seek immediate medical attention and take anti-inflammatory, anti-allergic, and other symptomatic treatment measures.

Precautions should be taken during operation to prevent it from contacting with the skin and expose to eyes. Please wear necessary protective equipment (gloves, protective goggles, PPE).

If exposed to skin or eyes, immediately rinse with water for at least 15 minutes, and wash the skin with soap and water. If swallowed by mistake, please SEEK EMERGENCY MEDICAL TREATMENT IMMEDIATELY!

### Fire and Explosion Hazards

This product does not belong to flammable liquids, explosives, oxidants, corrosives, poisons, and radioactive dangerous goods during storage and transportation process. This product does not belong to dangerous goods.

Fire Extinguishing Agents: Carbon dioxide, foam or chemical dry powder fire extinguishers can be used to extinguish the fire. When there is no other fire extinguishing agent, a large amount of mist water can be used to spray. Once the fire is out, the area needs to be cleaned up immediately.

Note: This product manual is an instruction guide that is provided by Shunda Polyurethane Ltd. to customers, but it is not legally guaranteed. Customers can modify data adjustment according to the actual operating conditions. If you have any question about the product usage, you may contact our company.

## TECHNICAL ASSISTANCE

[www.sdpu.ca](http://www.sdpu.ca)

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