

Description and Applications

Sealed PU Polyol 40 is a formulated polyols blend designed with HCFC-141b as blowing agents. It is used for spraying polyurethane rigid foam system along with Sealed PU Isocyanate 40 (MDI). It is widely used in the insulation markets such as industry building, reserve tank, house refrigerator storehouse, etc. This system is suitable to spray on variety matrix surface, such as steel, cement, stone, wood, brick and other materials. Excellent operability, mechanical properties, adhesive strength and low thermal conductivity.

Sealed PU Isocyanate 40 (MDI) can also be widely used in isocyanate foam, paints, adhesives, structural foam, cellular integral skin foam, automotive bumper and interior parts, high-resilience foam, synthetic wood, etc.

System Components

Components	Weight of Drum (Kg)
Sealed PU Polyol 40	220
Sealed PU Isocyanate 40 (MDI)	250

Component Properties

	Sealed PU Polyol 40	Sealed PU Isocyanate 40
Hydroxyl Nr (mgKOH/g)	330±20	-
NCO content (%)	-	31±1
Viscosity at 25°C (mPA.s)	280±40	200±50
Specific Gravity	1.13±0.05	1.23±0.02

Processing Parameters

Sealed PU Foam 40 system can be processed by high or low pressure machine or agitator.

Processing Parameters at 45-60°C	
Mix Ratio (v/v)	100/100
Cream Time (s)	<1
Gel Time (s)	5±2
Free Rise Density (Kg/m ³)	28.3±1.8

Foam Properties

Property	Value	Standard
Core Density (Kg/m ³)	35-45	ASTM D1622
Compressive Strength (kPa)	≥180	EN 826
Volume Dimensional Stability (+80°C, 48h) (%)	≤1.5	EN 1604
Volume Dimensional Stability (-30°C, 48h) (%)	≤1.0	EN 1604
10°C Thermal Conductivity (mW/m.K)	≤0.023	EN 13165
Fire Resistance	Class B3	

Storage and Shelf Life

Sealed PU Foam 40 should be kept in properly sealed, moisture-tight containers and stored indoors at ambient temperature (15-35°C) in a dry and well-ventilated area. Storage at low temperature (below 5°C) may cause difficulties in processing. Extended storage at temperatures above 60°C is not recommended to prevent from deterioration of the product quality. Under recommended storage conditions, shelf life of Sealed PU Polyol 40 is 6 months and 12 months for Sealed PU Isocyanate 40 from the date of production.

Safety

Most polyols generally present no significant hazard in use when simple precautions are followed. No special ventilation is recommended under anticipate conditions of normal use beyond that needed for normal comfort control. Eye protection such as chemical splash goggles and/or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid, airborne particles, or vapor. Contact lenses must not be worn. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Not normally considered a skin hazard. Wash hands and other exposed areas with mild soap and water before eating, drinking, smoking and when leaving work.

Sealed PU Isocyanate 40 is of low toxicity by inhalation and skin absorption. Because it has very low volatility, it should be of little hazard for brief exposures under normal conditions, e.g. in cases of small spillages. Nevertheless, PM-200 is an isocyanate-based composition and should be of certain toxicity. It may cause mild eye irritation and slight skin irritation. Refer to the Material Safety Data Sheet for more information regarding safety instructions.

Contact Info

Sealed Insulating Materials L.L.C.
Address: P.O. Box: 132828, Abu Dhabi, United Arab Emirates
Tel.: +971 2 5527570
Email: help.sealed@gmail.com
Website: www.sealedco.com