

PC-3228 Urethane Casting System

Elastomer for FDA-compliant Filter Applications

Technical Bulletin

Rev. Date: 6/27/2014

PC-3228 is a two component, unfilled, medium durometer casting system that produces a flexible elastomer possessing excellent toughness, high elongation, high tensile and high tear strength. PC-3228 has been formulated with raw materials that are in compliance with 21CFR 175.105, 21CFR 175.300, and 21CFR 177.1680, which makes it acceptable for contact with food surfaces. The system offers a combination of low viscosity and rapid gelation at room temperature for high productivity. Recommended use would be end caps for the air filtration market.

Key Features

- Low Mixed Viscosity with Ample Working Time.
- Possesses Excellent Elongation and Tear Strength properties for long-term durability.
- Formulated with raw materials that are FDA-compliant for dry-food contact applications.

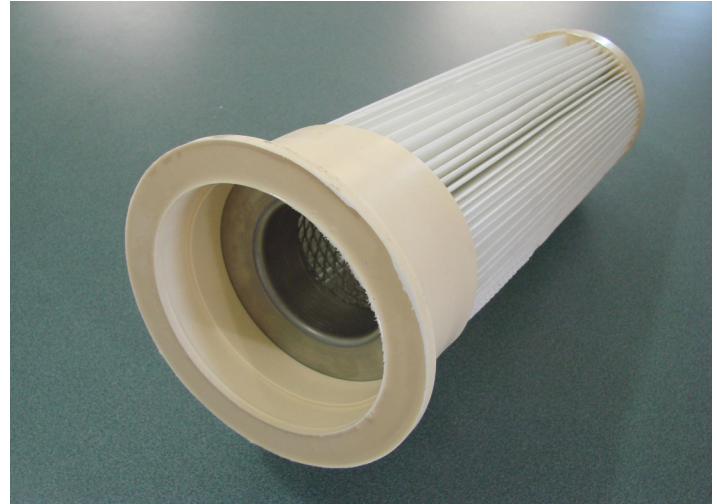
Typical Uncured Properties

Color	
PC-3228 Resin (Polyol Component)	Cream
PC-3228 Hardener (Isocyanate Component)	Clear Straw
PC-3228 Mixed	Cream
Viscosity (Brookfield) @ 25°C ± 1°C (77°F ± 2°F); cPs	
PC-3228 Resin	1680
PC-3228 Hardener	900
PC-3228 Initial Mixed	1100
Density @ 25°C ± 1°C (77°F ± 2°F); Lbs./Gal. (g/cm ³)	
PC-3228 Resin	8.64 (1.03)
PC-3228 Hardener	9.85 (1.18)
PC-3228 Mixed	8.95 (1.07)

Mixing Specifications & Characteristics

Mix Ratio	
Parts by Weight	100 parts Resin : 46 parts Hardener
Parts by Volume	2.5 parts Resin : 1.0 part Hardener
Processing Time @ 25°C ± 1°C (77°F ± 2°F); min:sec	
Gel Time (100 gram mass; 250 mL beaker)	5:15
Turn-Over Time (w/ mold temp. of 120-140°F)	< 8:00
Full Cure	7 Days

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Typical Cured Properties

Color	Cream
Hardness; Shore A	73
Tensile Strength; psi	1535
Elongation; %	444
Tear Strength (Die C); lbs./in.	218
Max Operating Temperature; °F	200–210

Processing Instructions

For good results, automatic mixing and dispensing equipment should be used. Please consult with Polyset technical staff before making final processing decisions.

Storage Information

Keep away from flames. Material should be used once container is opened. Long term storage of opened material should be under nitrogen. Shelf life of both PC-3228 Resin and PC-3228 Hardener is 6 months @ 25°C (77°F) in unopened containers.

Safety Information

Avoid direct contact. Use safety goggles or safety glasses with side shields and impervious gloves when handling PC-3228 Resin and PC-3228 Hardener. If skin contact occurs, wash with soap and water. If PC-3228 Resin or PC-3228 Hardener enters the eyes, flush with cool water for at least 15 minutes and call a physician immediately. Refer to product Safety Data Sheets for further information.