

PC-3185 Optimized Class I Filter Adhesive

Shore D 75-85, Off-White (Low Outgassing)

Technical Bulletin
Rev. Date: 11/07/2014

PC-3185 is a newly developed, halogen-free urethane adhesive for the HEPA Clean Room Market (Low Outgassing). The product formulation has been optimized to possess the following advantages:

Key Features

- Excellent adhesion to metal and plastic substrates.
- Low viscosity
- System is halogen free.
- Convenient Mix Ratio of 2:1 by volume

Typical Uncured Properties

Color		
Resin (Polyol component)		White
Hardener (Isocyanate component)		Amber
Mixed		Off-White

Viscosity, cps @ 25°C (77°F)		
Resin (Brookfield RVT #3 @ 20 rpm)		1600
Hardener		60
Mixed		700

Density, Lbs./Gal. (Specific Gravity) @ 25°C (77°F)		
Resin		10.80 (1.29)
Hardener		10.20 (1.22)
Mixed		10.60 (1.27)

Handling Characteristics

Mix Ratio		
By Weight		100 parts resin to 48 parts hardener
By Volume		2.0 parts resin to 1.0 part hardener
Gel Time, min:sec (100g mass)		4:00 - 4:30
Gel Time, min:sec (4mm thickness)		5:00 - 7:00

Typical Cured Properties

Color		Off-White
Hardness, Shore D		75-85
Yield Stress, psi		5570
Tensile Strength, psi		4110

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Typical Cured Properties (continued)

Elongation, %		16.4
Weight Loss (7 Days @ 65°C), %		0.015
Shrinkage, (21 Days @ 20-25°C), %		0.09

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

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 resin and hardener are six months at 25°C in unopened container.

Safety Information

Avoid direct contact. Use gloves when handling resin and hardener. If skin contact occurs, wash with soap and water. If resin or hardener enters the eyes, flush with cool water for at least 15 minutes and call a physician immediately. See PC-3185 Safety Data Sheets for further details.