



International Polyurethane Systems Inc.

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## Material Data Sheet Polyurea P2001/2

### Product Description:

A 100 % solids, two component, semi-rigid, high performance polyurea elastomer based on aromatic MDI. This formulation is based on amine polyols for high pressure spray equipment and has a very fast cure profile. It can be used for various industrial applications such as containment fields, concrete restoration, pipelines or various projects requiring a hardness range of 50 - 60 Shore D.

### Chemical Properties:

Properties	Unit	Test Method	Typical Values		
			Polyol	Isocyanate	Mixture
Appearance			amber	clear	amber
Density	g/cm <sup>3</sup>	ASTM-D 1475	1.01	1.14	1.08
Viscosity @ 22°C (Brookfield DV-2+ @ 20RPM Spindle 3)	cP	ASTM-D 4878	500 ± 200	800 ± 250	700 ± 200
Mixing Ratio @ 22°C	by volume		100	100	
Potlife @ 22°C	s				3 - 8

### Physical Properties:

Properties	Unit	Test Method	Typical Values
			Mixture
Shore Hardness	shore D	ASTM-D 2440	50 - 60
Tensile Strength (7 days)	psi	ASTM-D 412	2300 ± 300
Elongation @ Break (7 days)	%	ASTM-D 412	200 ± 50
Taber Abrasion (CS-17 wheel)	mg lost/1000 cycles	ASTM-D 4060	10.6
Water Absorption (24 hrs @ 21°C)	%	ASTM-D 471	Approx. < 1%
Tear Strength (Die C)	pli	ASTM-D 624C	400 ± 50
Modulus (100%, 200%)	psi	ASTM-D 412	1200 , 1900 ± 300
Acid/Base Resistance			Very Good

### Application:

Processing temperatures should be approximately 63 - 74 °C (145 - 165 °F) and at least 1800 - 2200 psi pump pressure to achieve proper mixing using high pressure plural equipment.

### Storage:

The materials must be protected against humidity and stored at 20 - 25 °C (75 - 77 °F) for optimum shelf life of 6 months.

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