

# For use in AL & spray metal molds

## PRISM<sup>®</sup> CM-200

### Solid Polyurethane RIM System

Product Code: **U750**

## POLYURETHANES

Product Information

### Description

PRISM CM-200 is a solid polyurethane system used in the reaction injection molding (RIM) process. The system incorporates an internal mold release (IMR) and is supplied as two reactive liquid components:

Component A is a polymeric diphenylmethane diisocyanate (MDI), and Component B is a polyol blend. *Note:* The polyol component phase-separates upon standing and must be thoroughly mixed via mechanical means prior to use.

### Typical Physical Properties\* of System

Property	ASTM Test Method (Other)	Unit	Value
<b>General</b>			
Specific Gravity	D 792		1.09
Density	D 1622	lb/ft <sup>3</sup>	68
Thickness		in	0.125
Shore Hardness	D 2240	D Scale	75
Mold Shrinkage	(Bayer)	%	0.7-0.9
<b>Mechanical</b>			
Tensile Strength at Break	D 638	lb/in <sup>2</sup>	7,000
Tensile Elongation at Break	D 638	%	9
Flexural Modulus	D 790	lb/in <sup>2</sup>	290,000
Flexural Strength	D 790	lb/in <sup>2</sup>	11,000
Unnotched Impact Strength	D 256	ft-lb/in	8
<b>Thermal</b>			
Deflection Temperature Under Load: 66 psi	D 648	°F	221
Heat Sag: 4-in Overhang, 1 hr at 250°F	D 3769	in (mm)	0.16 (4)
Relative Temperature Index: Electrical	(UL746B)		
0.125-in Thickness		°C	85**
0.250-in Thickness		°C	85**
Mechanical with Impact			
0.125-in Thickness		°C	70**
0.250-in Thickness		°C	75**
Mechanical without Impact			
0.125-in Thickness		°C	85**
0.250-in Thickness		°C	85**
<b>Flammability***</b>			
UL94 Flame Class: 0.125-in Thickness	(UL94)	Rating	V-0/5VA
<b>Electrical</b>			
Volume Resistivity	D 257	ohm-cm	5.2 E+14
Surface Resistivity	D 257	ohm	7.9 E+14
Dielectric Strength	D 149	kV/mm	19.2
Dielectric Constant at 1 MHz	D 150		3.06

\* These items are provided as general information only. They are approximate values and are not part of the product specifications.

\*\* Bayer Provisional Value.

\*\*\* Flammability results are based on small-scale laboratory tests for purposes of relative comparison and are not intended to reflect the hazards presented by this or any other material under actual fire conditions.