



Product Data

**Vacuum Casting Resins**

Product Data Sheet		Ren PIM 2185 VG		
Type	Black, Similar to ABS and Polypropylene (PP), high temperature resistant			
Color (Product Color)	Black			Test / ASTM
Mixing Ratio	By weight (A) Polyol : (B) ISO	80 : 100		
Pot Life	Seconds (0.22 lb @ 77°F) (100 g @ 25°C)	330		
Viscosity cps @ 77°F (25°C) (A) Polyol (B) ISO		1600 200		
Specific Gravity g/cc @ 77°F (25°C) (A) Polyol (B) ISO		1.13 1.16		
Hardness @ 77 °F (25°C) Shore A/D		80 D	D-2240	
Flexural Strength (psi)		8,700	D-790	
Flexural Modulus (psi)		--	D-790	
Tensile Modulus (psi)		189,000	D-638	
Tensile Strength (psi)		6,500	D-638	
Izod Impact (ft.-lbs./in <sup>2</sup> ) unnotched		3.9	D-256	
Elongation @ Break %		34	D-638	
Tear Strength (psi)		--	D-624	
Thermal Conductivity (W/mK)		--	BS874	
Heat Deflection Temp. °F (°C) @ 66 psi Test piece 4.5" x 0.5" x 0.25" (110 x 12.7 x 6.4 mm)		230 – 266 (110-130)	D-648	
Yield Strength (psi)		--	D-638	
Elongation @ Yield (%)		32		
Minimum Demold Time @ 149°F-158°F (65°C-70°C)		45 min.		
Shrinkage (in/in) According to Wall Thickness		0.002		
<b>POST CURING PROCESS: * yes</b>				
60 min. X 212 F (100 C) = 248 F (120 C)				
60 min. X 230 F (110 C) = 266 F (130 C)				

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**Handling Procedure****Ren PIM 2185 VG**

Mixing ratio (A) Polyol : (B) ISO	80 : 100
Pot life / 0.22 lbs. @ 77°F (100 gr. @ 25°C) (seconds)	330
Resin temperature °F (°C) (Heating chamber)	104 (40)
Mold temperature °F (°C) (Heating chamber)	158 (70)
Mixing time (seconds)	30 – 60
Demold time @ 158°F (70°C) (minutes)	Approx. 45
Post curing procedure	See front page
Primary degassing (minutes)	--

<b>Casting Procedure</b>	<p>Weigh the resins. Measure remaining amount in Cup "A"! Place cups in the machine and start vacuum pump. Switch on mixer motor. After reaching max. vacuum level mix both components together. Mix resins as fast as possible. Pour resin into silicone mold and leak vacuum chamber before the end of pot life.</p>
<b>Special Notes</b>	<p>Exact mold temperature is important. Resin temperature is important. Pre-heat cups in oven to 104°F (40°C).  Shake (A) Polyol and (B) ISO component cans before use.  Maximum wall thickness is 6 mm (0.24 in.)</p>

**Product information**

<b>MOLD LIFE</b>	Mold life can be increased by de molding the casting immediately after curing.
<b>Storage - unopened cans</b>	68°F (20°C) / protect against frost
<b>Storage - opened cans</b>	Place opened cans with caps in oven at 104°F (40°C)
<b>In case of crystallization of (B) ISO component</b>	Place (B) ISO can in oven at 158°F (70°C) for 2- 4 hours and stir resin afterwards.

5/02