



Product Data

Vacuum Casting Resins

Product Data Sheet		RenPIM™ -VG 2185		
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 ²) 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		
POST CURING PROCESS: * yes				
60 min. X 212 F (100 C) = 248 F (120 C)				
60 min. X 230 F (110 C) = 266 F (130 C)				

IMPORTANT: The following supersedes Buyer's documents. SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be liable for incidental, consequential, or indirect damages for alleged negligence, breach of warranty, strict liability, tort, or contract arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled or lab work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.

Handling Procedure**RenPIM™ -VG 2185**

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)	--

Casting Procedure	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.
Special Notes	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.)

Product information

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

4/03

Distributed by: Freeman Mfg. & Supply Company
800-321-8511
www.freemansupply.com