

TECHNICAL DATA SHEET

400N Series - HV

Tube Filling Compound



Thixotropic water blocking compound suitable for filling most common designs of optical fiber cable, where a high viscosity is desired. Unigel 400N-HV has a working temperature range from -50 to +80 °C and exhibits excellent resistance to oxidation for long term stability

Properties	Typical Value	Test Method
Appearance	Translucent	Visual
Density, 25°C (g/ml)	0.86	ASTM D1475
Flash Point (°C)	≥220	ASTM D92
Drop Point (°C)	≥170	ASTM D566
Cone Penetration, 25°C (dmm)	≥400	ASTM D217 (M)
Cone Penetration, -40°C (dmm)	≥230	ASTM D217 (M)
Viscosity, 50 s ⁻¹ , 25°C (Pa.s)	7.0	UNIGEL - CR Ramp 0-100 s ⁻¹
Oil Separation, 100°C, 24 hours (Wt %)	Zero	FTM 791-321 (M)
Volatile Loss, 100°C, 24 hours (Wt %)	≤1.0	FTM 791-321 (M)
Oxidation OIT, 190°C (min)	≥30	ASTM D3895
Acid Value (mg KOH/g)	≤0.1	ASTM D974-85
Water Content (ppm)	≤100	ASTM D4019-88
Hydrogen Generation, 80°C, 24 hours (μl/g)	≤0.02	UNIGEL
Water Resistance, 20°C, 7 days	Pass	SH/T0453
Fungal Growth	Nil	ASTM G21

Packaging Type	Net Weight (Kg)	Supply Options
210 Litre Drum (liners available)	175kg	Single Journey
1000 Litre IBC	825kg / 765Kg	Single Journey / Returnable
1000 Litre Stainless Steel Vessel	825kg	Returnable
1000 Litre Unibag	750kg	Single Journey

Compatibility

UNIGEL 400N-HV is compatible with most cable grade polymers. Tests on typical acrylate coated optical fiber shows no reaction but it is recommended that compatibility tests are made with all materials likely to come into contact with 400N-HV

Processing

UNIGEL 400N-HV has been designed for pumping from ambient conditions for high speed loose tubing lines

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