

TECHNICAL DATA SHEET

500N (A) Series Tube Filling Compound



Thixotropic water blocking compound suitable for filling most common designs of optical fiber cable, where extreme low temperature performance is desired. Unigel 500N (A) has a working temperature range from -70 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)	0.82	ASTM D1475
Flash Point (°C)	≥180	ASTM D92
Drop Point (°C)	≥200	ASTM D566
Cone Penetration, 25°C (dmm)	≥400	ASTM D217 (M)
Cone Penetration, -50°C (dmm)	≥230	ASTM D217 (M)
Cone Penetration, -60°C (dmm)	≥170	ASTM D217 (M)
Viscosity, 50 s ⁻¹ , 25°C (Pa.s)	4.3	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
Fungal Growth	Nil	ASTM G21

Packaging Type	Net Weight (Kg)	Supply Options
25 Litre Keg	20kg	Single Journey
210 Litre Drum (liners available)	160kg/ 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 500N (A) 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 500N (A)

Processing

UNIGEL 500N (A) has been designed for pumping from ambient conditions with high speed loose tubing lines

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