

Communication Markets Division

# 3M™ Scotchcast™ Encapsulating and Blocking Compound 4407

3M™ Scotchcast™ Encapsulating and Blocking Compound 4407 is a hard encapsulant designed specifically for permanent splice protection and cable blocking applications. Scotchcast 4407 compound is formulated for virtually every telecommunications application requiring a hard, non-reenterable compound with good handling and performance characteristics. Scotchcast 4407 compound is a two-part polyurethane compound. It features excellent wetting properties and low viscosity, which means it flows quickly and freely. Its low temperature cure properties mean that it may be used in a wide range of temperatures. Scotchcast 4407 compound doesn't contain TDI and meets applicable OSHA standards for safety.



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## 3M Scotchcast Encapsulating Compound 4407 Properties

Property	Test Method	Typical Value
Tensile strength	ASTM D 412	500 psi (3.45 MPa)
Elongation	ASTM D 412	150%
Hardness	Shore A	70
Apparent free isocyanate	ASTM D 2615-70 (Adaptation)	2.60%
Viscosity	Brookfield at 20 rpm	1200 cps mixed
Gel time	180 gm sample at 23°F	15-21 min.
Exotherm	180 gm sample at 75°F	150°F (66°C) max.
Water Absorption	7 days in 73°F water	0.28% weight gain
Insulation resistance	Aged 28 days/95°F/95% rel. humidity	5 × 10" ohms
Dielectric constant	ASTM D 150-70	4.7 at 10 <sup>3</sup> Hz 3.8 at 10 <sup>6</sup> Hz
Dissipation factor	ASTM D 150-70	0.04 at 10 <sup>3</sup> Hz 0.05 at 10 <sup>6</sup> Hz
Hydrolytic stability	7 days in water at 212°F	+2.0% weight gain -10 points, Shore A hardness
Dry heat aging	21 days at 225°F	6.0% weight loss +11 Shore A
Copper corrosion	30 days at 95°F/95% rel. humidity under 45V	0
Stress cracking	On cut and stressed polyethelene for 48 hours/120°F	0
Fungi resistance	ASTM G 21-70	0

## Ordering Information

Part Number	Product Description	Package Quantity	Packaging Type	3M Stock Number
4407-A	Encapsulating compound 89 ml (94g)	10 each	Guard bag overpacked	80-6100-6033-9
4407-B	Encapsulating compound 197 ml (209g)	10 each	Guard bag overpacked	80-6100-6034-7
4407-E	Encapsulating compound 283 ml (300g)	10 each	Guard bag overpacked	80-6100-6040-4
4407-C	Encapsulating compound 396 ml (420g)	10 each	Guard bag overpacked	80-6100-6036-2
4407-D	Encapsulating compound 636 ml (675g)	10 each	Guard bag overpacked	80-6100-6038-8
4407-1500/F	Encapsulating compound 1,415 ml (1500g)	2 each	Two part foil film bag	80-6110-1252-9

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