

106/8



235-300°F (113-150°C) Cure Epoxy Self-Adhesive

Typical applications

Aerospace
Marine
Industrial

Out life

7 days at 70°F (21°C)

Shelf life

3 months at 40°F (4°C)
6 months at 0°F (-18°C)

Description

106/8 is a 235°F (113°C) to 300°F (150°C) cure, general purpose, flame retardant epoxy, self-adhesive designed for bonding applications requiring high strengths from -67°F (-55°C) to 180°F (82°C).

Benefits/features

- Self-adhesive
- Flame retardant
- FAR 25.853 Appendix F, Part I, (a)(1)(i) & (a)(2)(ii)
- MMM-A-132B, Type I, Class 3, Group 3
- MIL-A-25463B, Type I, Class 1, Group 3

Application

106/8 is suited for structural and secondary bonding applications where flame retardant properties are required. Recommended for use with, but not limited to, Nomex & aluminum honeycombs, metals, cured & uncured epoxy composites, balsa, and foams.

106/8 can be supplied with most commercially available fibers (carbon, quartz, aramid, S-glass, E-glass, etc.) in both woven form (designated as NB) as well as unidirectional tape (designated as NCT).

Woven fabrics are available in standard commercial widths up to 60 inches (1.5 m). Unitape widths up to 39 inches (1 m) are available in standard fiber weights ranging from 70 – 300 gsm (0.014 – 0.060 psf).

106/8 can also be supplied as an adhesive in standard film weights from 0.030 to 0.090 psf (145-440 gsm), either unsupported or on a variety of commercially available reinforcements, including Non-woven polyester carrier (HC), Nylon mesh (N), & and tricot (TR).

Recommended processing conditions

106/8 can be cured at temperatures from 235°F (113°C) to 300°F (150°C), depending on part size and complexity. Low, medium, and high pressure molding techniques may be used for curing. Recommended cure cycle is 25psi (172kPa), 3°F (1.7°C)/min, ramp to 250°F (135°C), hold for 60 minutes, cool to <140°F (60°C).

Please contact your account manager or MCCFC technical support to discuss specific applications.



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CARBON FIBER AND COMPOSITES

Technical Data Sheet



Neat resin (values are average and do not constitute a specification)

Property	Measured value
Gel time @ 275°F (135°C), minutes	3-5
Specific gravity	1.30
T _g (DMA, E'), °F (°C)	252 (122)
<i>*cured @ 265°F for 120 minutes</i>	

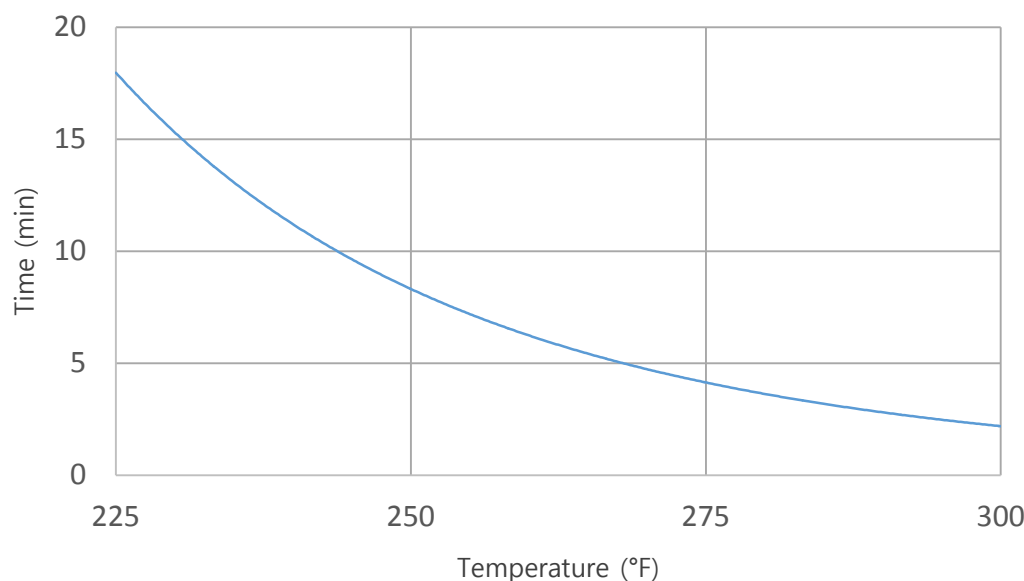
Mechanical data (values are average and do not constitute a specification)

S-GLASS UNITAPE

Autoclave cured, 50 psi, 60 minutes at 275°F, results as tested

Property	Test method	185gsm 31%RC		244gsm 41%RC	
		RT	160°F	RT	160°F
0° Tensile strength, ksi (MPa)	ASTM D-3039	242 (441)	-	186 (1280)	-
0° Tensile modulus, Msi (GPa)		7.4 (23)	-	6.1 (42)	-
0° Compression strength, ksi (MPa)	ASTM D-695 mod.	136 (400)	100 (689)	106 (731)	75 (517)
0° Flexural strength, ksi (MPa)	ASTM D-790	200 (593)	110 (758)	165 (1140)	97 (669)
0° Flexural modulus, Msi (GPa)		7.8 (24)	6.7 (46)	6.1 (42)	5.6 (38.6)
Short beam shear strength, ksi (MPa)	SACMA 8R-94	10.9 (50)	7.3 (50)	10.9 (75)	7.3 (50.3)
CD Peel strength, in-lbs/in (Nm/m)	ASTM D-1781	-	-	15 (67)	-
<i>*press cured @ 250°F for 60 minutes, 25 psi ¼" cell, 8 lb aluminum core</i>					

Gel time vs temperature



The information contained herein has been obtained under controlled laboratory conditions and are typical or average values and do not constitute a specification, guarantee, or warranty. Results may vary under different processing conditions or in combination with other materials. The data is believed to be reliable but all suggestions or recommendations for use are made without guarantee. You should thoroughly and independently evaluate materials for your planned application and determine suitability under your own processing conditions before commercialization. Furthermore, no suggestions for use or material supplied shall be considered a recommendation or inducement to violate any law or infringe any patent.

CORPORATE OFFICE
Composite Materials Division
1822 Reynolds Avenue
Irvine, CA 92614

Tel: (949) 253-5680
Fax: (949) 253-5692
www.mccfc.com
compositesales@mccfc.com

THE KAITEKI COMPANY
Mitsubishi Chemical Holdings Group