



Product Overview

Crestafix B39 is a high strength pumpable polyester adhesive formulated for production environment in boatbuilding and general fiberglass fabrication.

Features and Benefits

- High strength adhesive for poly/vinylester laminates
- No volume loss during pumping
- Long geltime and fast cure for quick demolding
- Excellent 'wet-out' of surface - strong bonds to poly/vinylester laminates
- ▶ Stacks well on top of stringers
- ▶ Hangs well on vertical and inverted surfaces
- ▶ Fast pumping speed with low pumping pressures
- ▶ Reliable strength in thin and thick bondlines

B39 was formulated to provide reliable structural bonds in both thin and thick bondlines (1/8" to 1", 3 – 25mm). B39 has low shrinkage, low exotherm and no volume loss during pumping. The long geltime and fast cure make it ideal for the bonding and quick demolding of large parts such as fiberglass overhead and interior liners and molded structural grids. B39 "hangs well" on vertical and inverted surfaces, and "stacks" well on top of stringers. For bondline thickness of 1" (25 mm) and less, the exotherm is low, reducing the chance of print-through in thin laminates. B39 can also be used for hull- to-deck joints and strake filling. B39 uses MEKP catalysts, and is available in "S" (Summer) and "W" (Winter) grades.

Application Properties

Typical Value	
Property	B39
Geltime/ Working time	55 Minutes
Exotherm, 100 Gram Mass	210-270°F (100-135°C)
Gap Filling	3 - 25 mm
Colour	Light Grey

Mechanical Properties

Typical Value	
Property	B39
Tensile Modulus ²	1963 MPa
Tensile Strength ²	13 MPa
Elongation at Break ²	1.0%
Lap-Shear Strength - GRP ²	4 MPa
Shrinkage	>1%
Hardness	70 Shore D

Liquid Properties

Typical Value	
Product	B39
Viscosity ¹	280,000 - 320,000 cP
Specific Gravity	1.05
Appearance	Light Grey
Shelf Life ³	12 Months

Catalyzation

5 Gallon Pails: Mix contents before catalyzation with a paddle type mixer. After catalyzation, mix again, with care to scrape edges and bottom of pail. If low temperature prevents a complete cure, increase shop temperatures, not the catalyst level. Assume that parts to be bonded have reached shop temperature. Drums: B39, B39HP is dispersed from the drum by gun application, with internal mix catalyst systems.

Surface Preparation

Surface to be bonded should be dry, clean and free of dust, oil or grease. Check resin system for secondary bonding time window to obtain a chemical bond. If surface is sanded, assure that no dust remains. Vacuum surface rather than using an airhose which only redistributes the dust. Avoid cleaning surface with solvents.

Catalyst Charts B39

B39 "S" (summer) Catalization Chart 50 - 60 Minute Geltime

Crompton Hi-Point 90 (1.11 g/cc)				Norox MEKP-9/ Norpol # 1 (1.11-1.14 g/cc)				Arkema Luperox DDM-9 (1.004 g/cc)						
Temperature °F °C		% of Catalyst (by weight)	cc/Gallon (3.78 L)	Grams/Gallon (3.78 L)	Temperature °F °C		% of Catalyst (by weight)	cc/Gallon (3.78 L)	Grams/Gallon (3.78 L)	Temperature °F °C		% of Catalyst (by weight)	cc/Gallon (3.78 L)	Grams/Gallon (3.78 L)
75	24	3.5	125.1	138.9	75	24	3	108.2	119.1	75	24	2.4	94.9	95.3
80	27	2.7	96.5	107.7	80	27	2.35	84.8	93.3	80	27	1.9	75.1	75.4
85	29	2.2	78.7	87.3	85	29	1.8	69.4	71.4	85	29	1.5	59.3	59.5
90	32	1.75	62.6	69.5	90	32	1.45	52.3	67.6	90	32	1.2	47.4	47.6
95	35	1.4	51.8	57.6	95	35	1.25	45.1	49.6	95	35	1.0	39.5	39.7

Catalyst Charts B39

B39 "W" (Winter) Catalization Chart 50 - 60 Minute Geltime

Crompton Hi-Point 90 (1.11 g/cc)					Norox MEKP-9/ Norpol # 1 (1.11-1.14 g/cc)					Arkema Luperox DDM-9 (1.004 g/cc)				
Tempera- ture °F °C		% of Cata- lyst (by weight)	cc/Gallon (3.78 L)	Grams/ Gallon (3.78 L)	Tempera- ture °F °C		% of Cata- lyst (by weight)	cc/Gal- lon (3.78 L)	Grams/ Gallon (3.78 L)	Tempera- ture °F °C		% of Cata- lyst (by weight)	cc/Gal- lon (3.78 L)	Grams/ Gallon (3.78 L)
60	16	3.4	121.6	134.9	60	16	2.7	97.4	107.2	60	16	2.5	98.8	99.2
65	18	2.5	89.4	99.2	65	18	2.2	79.4	87.3	65	18	1.8	71.2	71.4
70	21	2.1	75.1	83.3	70	21	1.8	64.9	71.4	70	21	1.45	57.3	57.6
75	24	1.8	64.4	71.4	75	24	1.4	50.5	55.6	75	24	1.2	47.7	47.6
80	27	1.4	50.1	55.6	80	27	1.15	41.4	45.6	80	27	1.0	39.5	39.7

These catalization charts have been generated from laboratory conditions and a constant controlled setting. Specific Gravity of the B39 is 1.05 g/cc. The laboratory moisture level is less than 20% during these tests. Humidity will affect the results shown above. The information contained in this chart should be used as a base point. Geltimes must be confirmed at shop conditions for use in production environments.

Storage

The product should be kept in securely enclosed containers. Storage should be in a dry place out of direct sunlight. The temperature should be between 65-77°F (18-25°C). Allow B39 to reach shop temperature before using. Keep containers closed to eliminate styrene evaporation, and to avoid change in properties of the material.

Packaging

B39 is supplied in pails or drums.

Health and Safety

See separate Material Safety Data Sheet.

1. Measured using Brookfield Viscometer at 25°C

2. Test to BS EN ISO 527-2-1996.

3. The shelf life is defined from date of manufacture if stored as recommended. The expiry date is indicated on the product labels.



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