

## TECHNICAL DATA SHEET

# APF 7

POLYESTER FILLER  
STYRENE FREE, HIGH TEMPERATURE USE

### DESCRIPTION

APF 7 is a quick setting industrial use filler paste. It is specifically formulated for use in the aircraft, aerospace, and other industries that perform manufacturing and repair work on items requiring above normal temperature ranges. The service temperature for APF 7 is up to 400°F (204°C). APF 7 is both chemical and water resistant, and may be used in underwater applications. Applications of APF 7 are both fast and permanent. Excellent machining and finishing results are achieved by grinding, sanding, scraping, etc. When exposed to elevated temperatures APF 7 has a tendency to darken, however it does not gas, bubble, or cause any finish distortion. This product does not contain wax and bonds readily to itself or other substrates such as FRP/SMC, high temperature epoxy molds, aluminum, steel, cast iron, urethane foam parts, and others. APF 7 is non-metallic, non-conductive, and non-sparking. It contains no styrene and is low odor.

### PROPERTIES

- Exceptional adhesion
- High service temperature
- Comes in white,gray,black colors
- High gloss finish
- Excellent finishing and machinability
- Very quick setting
- Minimal shrinkage
- Easy to use
- Low moisture absorption
- Excellent shelf life

### PHYSICAL PROPERTIES

	Units	APF 7	Cream Hardener	Mixed
Composition		Polyester resin	BPO	Polyester paste
Mix ratio – by weight		100	2	100/2
Aspect		Thixotropic paste	Paste	Thixotropic paste
Color	Visual	White,Gray,Black	White, Black, Red	Varies
Density at 77°F (25°C)	lbs./gal (g/cc)	13.7 (1.64) – 14.8 (1.77)	10.0 (1.2)	13.6 (1.63) – 14.7 (1.76)
Pot life (102g) at 77°F (25°C)	Minutes			4.0 – 7.0
Volumetric weight (average)	lbs/in <sup>3</sup> (g/cc)			0.061 (1.69)

## PROCESSING CONDITIONS

- Thoroughly blend 100 parts resin with 2 parts hardener by weight for 1 to 1 ½ minutes in a clean dry container or on a clean dry surface.
- Carefully scrape the surfaces while blending to ensure complete mixing and uniformity.

## MIXING INSTRUCTIONS

Stir contents of can thoroughly using a spatula or putty knife. Place the required amount of filler and cream hardener on a disposable clean surface. Mix 100 parts paste to 2 parts BPO cream hardener by weight; i.e. size of golf ball (paste) to a two inch strip of BPO catalyst. Set up time of mix at room temperature will be 5-10 minutes and may be adjusted faster or slower by increasing or decreasing the amount of hardener, the use of too much hardener can cause gumminess in the filler. After 15-20 minutes the filler may be filed or sanded to final finish.

## SURFACE PREPARATION and APPLICATION

- The area to be filled or repaired should be thoroughly cleaned, roughened, cleaned again and allowed to dry prior to application to ensure the best possible adhesion.
- The mixed APF 7 should be buttered into the area, avoiding trapping air during application.
- After curing to a tack-free state, the material can be sanded and finished as needed.

## MECHANICAL PROPERTIES

<b>MECHANICAL AND THERMAL PROPERTIES - Cure schedule: 7 days/77°F (25°C)</b>			
<b>Property</b>	<b>Test Method</b>	<b>Units(s)</b>	<b>Test Results</b>
Hardness	ASTM D2240	Shore D	80 - 90
Flexural strength	ASTM D790	psi (MPa)	6,280 (43)
Tensile strength	ASTM D638	psi (MPa)	3,150 (22)
Compressive strength	ASTM D-695	psi (MPa)	9,870 (68)
Peak service temperature		°F (°C)	400 / 204

## HANDLING PRECAUTIONS

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Normal health and safety precautions should be observed when handling these products:

- Ensure good ventilation.
- Wear gloves, glasses and protective clothes.

For further information, please consult the Safety Data Sheets.

## STORAGE CONDITIONS

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- Product shelf life of polyester resin is 12 months when stored in original unopened containers between 65 – 77°F (15 – 25°C). Any opened can must be tightly closed.
- Product shelf life of BPO hardener is 18 months when stored in original unopened containers between 65 – 77°F (15 – 25°C). Any opened can must be tightly closed.
- Polyester resin contains filler which has the potential to separate in time, please re-homogenize prior to use.

## PACKAGING

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Packaging information on request, please contact your local sales representative or find your local contact on [www.sikaadvancedresins.us](http://www.sikaadvancedresins.us)

## CONTACT

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### UNITED STATES

#### Sika Corporation

30800 Stephenson Highway  
Madison Heights, Michigan 48071 – USA  
Tel.: (+1) 248 588-2270  
Fax: (+1) 248 577-0810  
E-mail: [axsonmh@axson.com](mailto:axsonmh@axson.com)  
Website: [www.sikaadvancedresins.us](http://www.sikaadvancedresins.us)