PRODUCT BULLETIN

August 2023

ArmorFlex® 953 Series

HIGH GLOSS BUFFBACK® High Performance Flexible Gel Coat

DESCRIPTION

Polynt Composites' ArmorFlex® 953 Series gel coats are high performance products formulated for the fiberglass industry. They are primarily formulated for marine and sanitary applications but should be used in any application where water and chemical resistance are needed. ArmorFlex® 953 Series also have exceptional gloss and buffing characteristics.

While offering these benefits, the ArmorFlex® 953 Series gel coats have retained the important construction application qualities expected from Polynt's gel coats, such as resistance to porosity, tearing, and color separation, sag resistance, consistent liquid properties, excellent patch-ability, and more. These all add up to higher quality appeal in FRP parts made from Polynt's ArmorFlex® HIGH GLOSS BUFFBACK® gel coats.

ArmorFlex® 953 Series gel coats have enabled customers to meet and surpass all requirements of the American National Standard for plastic bathtubs, shower receptors and shower stalls, ANSI Z124.1, .2 and .3 –1995, Sec. 6.1.1.

Gel coats in the 953 Series require only the addition of the proper amount of the appropriate methyl ethyl ketone peroxide to cure.

ArmorFlex® HIGH GLOSS BUFFBACK® gel coats are available in the same wide range of colors as other Polycor® gel coats. Refer to Polynt's Polycor® Color Card for color selection. Standard base white ArmorFlex® is 953WJ340.

BENEFITS & FEATURES

- Excellent water resistance for reduced osmotic blistering
- Good chemical resistance for long-lasting durable finishes
- Easier, quicker gloss recovery (less buffing time to achieve gloss)
- Higher gloss recovery when polishing back aged or exposed gel coat surfaces
- Higher gloss in patches and surrounding refinished area
- Higher gloss recoverability from lower gloss molds

PROPERTIES – LIQUID

Property[1]	Unit	Value	
		Colors	Whites
Viscosity[2]	cps	15,000	16,000
Thix Index[3]	-	6.25	6.0
Flash Point	°C/°F	27/80	27/80
Volatile Organic Compound	%	38.0	35.0
Weight per Gallon	lbs/gal	10 (color dependent)	10.75
Gel Time[4]	minutes	15	15
Lay-up Time	minutes	60	60
Sag Resistance	-	Good at 20 mils	Good at 20 mils
Hide (Most Formulations)[5]	-	3 to 20 mils wet (color dependent)	4 to 12 mils (color dependent)

1) All properties at 25°C/77°F unless otherwise noted
2) Brookfield Viscometer RVF Spindle #4 at 4 RPM
3) Brookfield Viscometer RVF Spindle #4 at 2/20 RPM
4) 1.8% Arkema Luperox® DDM-9
5) Reds, yellows, and dark blues may have low hiding power. Ask a Polynt representative whether the desired red, yellow, or blue requires special application procedure (increased film thickness through multiple applications.)

APPLICATION

ArmorFlex® 953 Series gel coats are formulated for spray application. Brushing or rolling is not recommended. Refer to Polynt's Composites Applications Guide for additional information.

Refer to Polynt's Composites Applications Guide ("Cookbook") for equipment and application recommendations. Each user must determine the suitability of this product to his/her particular mode of operation and intended end-use application. A Polynt representative will be available to assist in the proper selection of all Polynt products available for commercial use.

CURE

It is recommended that gel time be checked in the customer's plant because age, temperature, humidity, and initiator will produce varied gel times. All data referencing gel or cure refers specifically to Arkema Luperox® DDM-9 initiator. United Initiators Norox® MEKP-9 and Norox® MEKP-9H, AkzoNobel CADOX® L-50a and CADOX® D-50 are expected to yield similar performance. Arkema Luperox® DHD-9, United Initiators Norox® MEKP-925, and Norox® MEKP-925H may yield slightly shorter gel and cure times.

The recommended initiator range is 1.2% to 3.0% with 1.8% at 77°F being ideal. Normally, the gel coat film is ready for lamination in 45 to 80 minutes. This time element is dependent on material temperature, room temperature, humidity, air movement, and initiator concentration. Note: ArmorFlex® 953 Series films have a tendency to air dry and lay-up times may be deceiving. If lay-up time is checked by the finger method, slight pressure and rubbing should be used. These products should not be used when temperature conditions are below 60°F, as curing may be adversely affected.

CAUTION

ArmorFlex® 953 Series gel coats may not be compatible in the liquid state with other gel coats and resins. Spray and pumping equipment should be completely clean before using ArmorFlex® 953 Series products. Do not add any material, other than the recommended methyl ethyl ketone peroxide, to this product without the advice of a representative of Polynt.

SHELF LIFE & STORAGE

The shelf life of ArmorFlex® 953 Series gel coats is 120 days from the date of manufacture from Polynt. The shelf life of fast cure (gel time less than 9 minutes) ArmorFlex® 953 Series gel coats is 60 days from the date of manufacture from Polynt. To maximize usage life and maintain optimum properties, resins and gel coats should be stored in the original closed container at temperatures below 23°C/73°F and away from ignition sources and sunlight. Keep containers sealed to prevent moisture pick-up and monomer loss.

RELATED PRODUCTS

PatchAid® 970X900, 970XJ037, and 970XA014

SAFETY & WARRANTY

To receive a copy of our safety and warranty information, please email safetyandwarranty@polynt.com.