



Your Formula for Success
RESINS | GEL COATS | COLORANTS

VIPEL® F737-P SERIES POLYESTER RESIN



Product Information

RESILIENT ISOPHTHALIC POLYESTER RESIN

Typical Cast Mechanical Properties ¹

Test	Unit of Measure	Nominal	Test Method
Tensile Strength	psi/MPa	12,400/85.5	ASTM D638
Tensile Modulus	psi/GPa	490,000/3.4	ASTM D638
Tensile Elongation	%	4.0	ASTM D638
Flexural Strength	psi/MPa	20,400/141	ASTM D790
Flexural Modulus	psi/GPa	570,000/3.9	ASTM D790
Heat Distortion Temp.	°F/°C@264 psi	197/92	ASTM D648
Izod Impact	ft-lbs/inch of notch	4.2	ASTM D4812
Barcol Hardness		39	ASTM D2583

Typical Liquid Properties²

VERSIONS	MEKP	%	GT	Gel to Peak	Peak Exotherm °F/°C	Visc	SP	rpm	cps	TI	Styrene %
F737-PTA-20	MEKP 925	1.25	20	7	412/211	LV	3	60	440	2.2+	47
F737-PTB-20 ²	MEKP 925	1.25	20	16	379/193	LV	3	60	440	2.2	46
F737-PTC-20 ¹	MEKP 925	1.25	20	13	379/193	LV	3	60	440	2.2	43
F737-PTE-37	MEKP 925	1.25	37	10	365/185	LV	3	60	650	2	42
F737-PTF-20 ¹	MEKP 925	1.25	20	12	388/198	LV	3	60	450	2.7	43
F737-PTT-30	M-50	1.25	30	13	372/189	LV	3	60	425	2.0	49
F737-PTT-40	M-50	1.25	40	17	363/184	LV	3	60	425	2.0	49

1) Pigmented White

2) Blue Dye

*Typical properties are not to be construed as specifications.

DESCRIPTION

AOC's Vipel F737-P series is a resilient isophthalic polyester resin with excellent mechanical properties. Vipel F737-P resins are used extensively in grating and in the construction of large diameter water pipes for transporting water to and from power stations. Vipel F737-P resins can be adapted for a variety of fabrication processes.

BENEFITS

Internationally Recognized

AOC's Vipel F737-P series resins have been used in many corrosion resistant applications such as grating and water pipes, etc.

Corrosion Resistance

This resin provides excellent corrosion resistance when used in contact with inorganic and organic acids. Refer to AOC's "Corrosion Resistant Resin Guide" for corrosion resistance information or for questions regarding suitability of a resin to any particular chemical environment contact AOC.

Versatile

Suitable for various fabricating methods such as hand lay-up, spray-up, filament winding, etc.

Food and Drug

All resins in this datasheet are manufactured from raw materials that are listed in FDA regulation Title 21 CFR 177.2420. It is the fabricator's responsibility to also be sure that the final composite is well cured. All composites used for FDA applications should be post cured at 180°F/82°C for at least 4 hours. After post curing, laminate should be washed with soap and water and rinsed.

F737-P SERIES RESILIENT ISOPHTHALIC POLYESTER RESIN



PERFORMANCE GUIDELINES

A. Keep full strength catalyst levels between 1.0% - 2.0% of the total resin weight.

B. Maintain shop temperatures between 65°F/18°C and 90°F/32°C and humidity between 40% and 90%. Consistent shop conditions contribute to consistent gel times and will help the fabricator make a high quality part.

C. Sanding and/or grinding is recommended if a secondary bond is applied to a laminate that was made with a resin containing wax.

STORAGE STABILITY

This product is stable for three months from the date of manufacture when stored in the original containers, away from direct sunlight or other UV light sources and at or below 77°F/25°C.

Storage stability of two months or less should be anticipated if the storage temperature exceeds 86°F/30°C.

After extended storage, some drift may occur in the product viscosity and gel time.

Storage in plastic totes made out of materials such as polyethylene (PE) or polypropylene (PP) in particular translucent PE/PP will accelerate gel formation and result in a significantly reduced storage stability.

Storage of this resin outdoors in translucent plastic totes may reduce the storage stability to only a few weeks. AOC cannot assume responsibility for gel formation under these storage conditions.

SAFETY

See the appropriate Safety Data Sheet for guidelines.

ISO 9001:2008 CERTIFIED

The Quality Management Systems at every AOC manufacturing facility have been certified as meeting ISO 9001:2008 standards. This certification recognizes that each AOC facility has an internationally accepted model in place for managing and assuring quality. We follow the practices set forth in this model to add value to the resins we make for our customers.

FOOTNOTES

(1.) Based on tests of the base resin with 40% styrene at 77°F/25°C and 50% relative humidity. All tests performed on unreinforced cured resin castings. Thixotropic components, if applicable, are excluded from casting samples. Castings were prepared using 1% BPO and post cured 1 hour at 93°C, 1 hour at 116°C, and 2 hours at 138°C.

(2) The gel times shown are typical but may be affected by catalyst, promoter, inhibitor concentration, resin, mold, and shop temperature. Variations in gelling characteristics can be expected between different lots of catalysts and at extremely high humidities. Pigment and/or filler can retard or accelerate gelation. It is recommended that the fabricator check the gelling characteristics of a small quantity of resin under actual operating conditions prior to use.



Your Formula for Success
RESINS | GEL COATS | COLORANTS

AOC World Headquarters
955 Highway 57 East, Collierville, TN 38017

+01 901.854.2800
AOC-Resins.com

Pub. F737-P Series NA
Effective Date: Mar. 2017
Copyright © 2017

SALES CONTACTS

NORTH AMERICA
Toll free: +1 866 319 8827
northamerica@aoc-resins.com

LATIN AMERICA
+01 863 815 5016
latinamerica@aoc-resins.com

MIDDLE EAST
+44 1206 390415
middleeast@aoc-resins.com

EUROPE
+44 1206 390415
europa@aoc-resins.com

AOC UK LTD.
+44 01206 390400
salesUK@aoc-resins.com

INDIA
+44 1206 390415
india@aoc-resins.com

ASIA/AUSTRALIA
+44 1206 390415
asia@aoc-resins.com