



Formosa Plastics®

**Formolon® Polyvinyl Chloride Resins
Specialty**

Quality, Value and Performance



World-class Manufacturing and Product Performance

As the largest specialty PVC resin manufacturer in the United States, Formosa Plastics offers a wide range of molecular weights and viscosities for specialty dispersion resin and blending resin applications. The company's entire range of Formolon® PVC resins are designed to deliver superior performance and processability.

Formosa Plastics combines the technical benefits of North America's state-of-the-art production facilities with more than 50 years of experience in PVC resin manufacturing. As one of the first PVC producers to offer the efficiencies of full-scale vertical integration, we've grown our PVC resins business by helping our customers succeed.

Formolon® Specialty PVC Resins – Product Range

Dispersion Homopolymer Resins | Dispersion Copolymer Resins.
Suspension Copolymer Resins | Blending Homopolymer and Copolymer Resins.

Formolon® Dispersion (Specialty) PVC Resins – Properties and Performance Attributes

- Most grades are FDA approved
- Low moisture and VOC content grades available
- Products exhibit properties that facilitate use in a variety of applications
- End-use applications range from sheet flooring and insect screening to caps and closures



Formolon® F28 / F260

Major End-Use Applications

FLOORING

- Vinyl Floor Tiles (VCT)
- Flooring Wear Layers
- Flooring Foam Layers
- Anti-Fatigue Mats

AUTOMOTIVE

- Automotive Mats & Sealants
- Interior Surfaces & Trim
- Adhesives
- Boat bumpers

INDUSTRIAL/CONSTRUCTION

- Strand coating
- Conveyor belt
- Caulks & sealants
- Chemically expanded foams



Formolon® F1071 / FNVA

Specialty Polyvinyl Chloride

Applied Polymer Innovation



Foam Layers



Boat Bumpers



PVC Textiles



Vinyl Flooring

Products & Technical Specifications (Selected Materials)

Dispersion Homopolymer Resins

Products	F10	F24A	F28	FNVA	FKVF	FKVH
Material Type	Medium Molecular Weight Dispersion Homopolymer	Low Molecular Weight Dispersion Homopolymer	High Molecular Weight Dispersion Homopolymer	High Molecular Weight Dispersion Homopolymer	Medium Molecular Weight Dispersion Homopolymer	High Molecular Weight Dispersion Homopolymer
Application	Flooring Wear Layers, Conveyor Belting, Traffic Cones, Strand Coatings, Auto Interior & Screen Printing Inks	Flooring Foam Layers, Anti-Fatigue Mats, Carpet Backings, Screen Printing Inks & Fabric Coatings	Strand Coatings, Boat Bumpers, Play Balls, Auto Mats & Fabric Coatings	Examination Gloves, Flooring Wear Layers, Bottle Cap Closures, Wall Coverings & Fabric Coatings	Auto Sealants, Screen Printing Inks, Fabric Coatings	Auto Sealants, Screen Printing Inks, Play Balls, Sport Balls & Fabric Coatings
Relative Viscosity	2.30	2.15	2.65	2.90	2.25	2.65
Inherent Viscosity	0.98	0.90	1.20	1.30	0.96	1.20
K-Value	68	65	75	80	67	75
Volatiles	0.3%	0.3%	0.3%	0.3%	0.5%	0.3%
Methanol Extract	1.5%	1.8%	1.4%	1.5%	1.0%	1.5%
Bound Vinyl Acetate	n/a	n/a	n/a	n/a	n/a	n/a
Brookfield 2 rpm*, POISE	60	125	70	55	8600	5000
Brookfield 20 rpm*, POISE	45	70	45	45	920	600
Severs**	80	70	70	80	80	80
Gelation Temperature, F	158	154	180	195	158	172
Fog (gravimetric)	n/a	n/a	n/a	n/a	n/a	n/a

Note. Viscosity from FKVF , F53K use 100:100 (Resins :DOP), other grades use 100:60 (Resins :DOP)



Sythenic Leather



Blister Packaging



Cap Liners



Printing Inks



Adhesives

(continued) Dispersion Homopolymer Resins

F1071	F34	F53K	F74
High Molecular Weight, Fine Particle Size Dispersion Homopolymer	Medium Molecular Weight Dispersion Homopolymer	Medium Molecular Weight Dispersion Homopolymer	Medium Molecular Weight Dispersion Low Fog/VOC Homopolymer
Flooring Wear Layers, Can Liners, Examination Gloves, Protective Coatings & Cap Closures	Flooring Sheet Good, Foam Layers, Anti-Fatigue Mats, Carpet Backing & Screen Printing Inks	Auto UBC, Sealants, Screen Printing Inks, Fabric Coatings, Anti- Fatigue Mats, Low Fog/ VOC applications	Artificial Leather, Transportation, Others, Technical Coatings, Textile Coatings, Low Fog/VOC applications
2.83	2.24	2.25	2.32
1.25	0.94	0.93	1.00
79	67	68	70
0.5%	0.5%	0.5%	0.5%
1.0%	2.5%	2.5%	3.5%
n/a	n/a	n/a	n/a
52	220	3000	350
38	105	400	160
80	250	20	n/a
180	152	165	190
n/a	n/a	0.5mg	0.5mg

Dispersion Copolymer Resins

Products	F40	F45
Material Type	VCM & VAM Dispersion Copolymer	VCM & VAM Dispersion Copolymer
Application	Auto Sealants, Carpet Backing, Laminating Adhesives, Screen Printing Inks & Oil & Air Filter Adhesives	Auto Sealants, Carpet Backing, Laminating Adhesives, Screen Printing Inks & Oil & Air Filter Adhesives
Relative Viscosity	2.40	2.50
Inherent Viscosity	1.04	1.10
K-Value	70	72
Volatiles	0.3%	0.4%
Methanol Extract	1.6%	2.0%
Bound Vinyl Acetate	5.0%	7.0%
Brookfield 2rpm*, POISE	85	135
Brookfield 20rpm*, POISE	55	90
Severs**	90	90
Gelation Temperature, F	152	142

* Brookfield 2 & Brookfield 20 aged 2 hrs ** Severs 100 psig aged 2 hrs

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Applied Polymer Innovation



Products & Technical Specifications (Selected Materials)

Blending Homopolymer and Copolymer Resins

Products	F260	F265
Material Type	Fine Particle Size Plastisol Blending Resin Homopolymer	Fine Particle Size VCM & VAM Plastisol Blending Resin Copolymer
Application	Chemically Expanded Foams, Fabric Coatings, Cap Closures and Strand Coatings	Carpet Backings, Automotive Sealants & Dip Coatings
Relative Viscosity	2.10	1.95
Inherent Viscosity	0.87	0.85
K-Value	63	63
Bulk Density, g/cc	0.57	0.60
Volatiles	0.5%	0.3%
Sieve Analysis, 40 Mesh	100%	100%
Sieve Analysis, 270 Mesh	97%	97%
Avg. Partical Size, Micron	35	35

Suspension Copolymer Resins

Products	F113	F172	F186
Material Type	Copolymer Suspension Resin	Copolymer Suspension Resin	Copolymer Suspension Resin
Application	Vinyl Floor Tiles & Solution Coatings	Extruded Films, Calendered Films & Solution Coatings	Extruded Films, Calendered Films & Solution Coatings
Relative Viscosity	1.55	1.83	1.83
Inherent Viscosity	0.48	0.69	0.69
K-Value	48	56	56
Bulk Density, g/cc	0.56	0.60	0.60
Volatiles	0.3%	0.3%	0.3%
Sieve Analysis, 40 Mesh	99.9%	99.0%	99.0%
Bound Vinyl Acetate	13%	10%	14%

Our Commitment to Our Customers

At Formosa, we're dedicated to providing innovative products, consistent quality, unsurpassed service, and reliable on-time delivery. Our technical teams ensure you receive products that perform consistently, while our service teams help you optimize performance and maximize the value of our products.

With the largest private rail fleet in the industry, you can track your orders and railcar deliveries online — 24/7/365.



Sedex is a world leader in responsible sourcing. They empower companies with technology and insights to implement practices and policies to build a responsible business supply chain.



Ecovadis's purpose is to guide all companies toward a sustainable world and act as a North Star to ensure their growth is providing positive impact for our planet and society

If you need more, just ask. After all, we're your partner.

Our Commitment to Sustainability

Formosa Plastics Corporation, U.S.A. is dedicated to advancing the United Nations' 17 Sustainable Development Goals. Our sustainability information reflects our responsibility as a global company and local corporate citizen.

Every action, big or small, contributes to a better world today and for future generations.

To learn more about our sustainability initiatives, please visit www.fpcusa.com/sustainability.





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