

# Formolon<sup>®</sup> Polyvinyl Chloride Dispersion PVC Products

Quality, Value and Performance

### World-class Manufacturing and Product Performance

When success is essential, Formosa is your quality choice.

As one of the largest specialty PVC resin manufacturers in North America, Formosa Plastics offers a wide range of molecular weights and viscosities for specialty dispersion and blending applications. The company's entire range of Formolon<sup>®</sup> 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 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<sup>®</sup> Dispersion **PVC Resins – Product Range**

Suspension Copolymer Resins.

Blending Homopolymer and Copolymer Resins.

Dispersion Homopolymer Resins.

Dispersion Copolymer Resins.

### Formolon<sup>®</sup> 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 and traffic cones.





# **Major End-Use Applications**

#### FLOORING

Vinyl floor tiles (VCT).

Flooring wear layers.

Flooring foam layers.

Fatigue mats.

- **AUTOMOTIVE**
- Automotive mats & sealants.
  - Interior trim.
  - Oil & air filter adhesives.
  - Boat bumpers.

#### INDUSTRIAL/ CONSTRUCTION

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

Dispersion Homopolymer Resins			
PRODUCTS	F10		
MATERIAL TYPE	Medium Molecular Weight Dispersion Homopolymer		
APPLICATION	Flooring Wear Layers, Conveyor Belting, Traffic Cones, Strand Coatings, Auto Interior & Screen Printing Inks		
RELATIVE VISCOSITY	2.30		
INHERENT VISCOSITY	0.98		
K-VALUE	68		
VOLATILES	0.3%		
METHANOL EXTRACT	1.5%		
BOUND VINYL ACETATE	n/a		
BROOKFIELD 2 rpm*, POISE	60		
BROOKFIELD 20 rpm*, POISE	45		
SEVERS**	80		

**GELATION TEMPERATURE, F** Brookfield 2 & Brookfield 20 aged 2 brs 158

Severs 100 psig aged 2 hrs



### **Specialty Polyvinyl Chloride**



### Applied Polymer Innovation













**Traffic Cones** 

Oil & Air Filter Adhesives

Vinyl Flooring

Synthetic Leather

hetic ber

Blister Packs

**Cap Liners** 

## Products & Technical Specifications (Selected Materials)

Suspension Copolymer R	lesins			Blending Homopolymer a	and Copolymer R	esins
PRODUCTS	F113	F172	F186	PRODUCTS	F260	F265
MATERIAL TYPE	Copolymer Suspension Resin	Copolymer Suspension Resin	Copolymer Suspension Resin	MATERIAL TYPE	Fine Particle Size Plastisol Blending Resin Homopolymer	Fine Particle Size VCM & VAM Plastisol Blending Resin Copolymer
APPLICATION	Vinyl Floor Tiles & Solution Coatings	Extruded Films, Calendered Films & Solution Coatings	Extruded Films, Calendered Films & Solution Coatings	APPLICATION	Chemically Expanded Foams, Fabric Coatings, Cap Closures and Strand Coatings	Carpet Backings, Automotive Sealants & Dip Coatings
RELATIVE VISCOSITY	1.55	1.83	1.83	RELATIVE VISCOSITY	2.10	1.95
INHERENT VISCOSITY	0.48	0.69	0.69	INHERENT VISCOSITY	0.87	0.85
K-VALUE	48	56	56	K-VALUE	63	63
BULK DENSITY, g/cc	0.56	0.60	0.60	BULK DENSITY, g/cc	0.57	0.60
VOLATILES	0.3%	0.3%	0.3%	VOLATILES	0.5%	0.3%
SIEVE ANALYSIS, 40 MESH	99.9%	99.0%	99.0%	SIEVE ANALYSIS, 40 MESH	100%	100%
BOUND VINYL ACETATE	13%	10%	14%	SIEVE ANALYSIS, 270 MESH	97%	97%
		1	1	AVG. PARTICAL SIZE, MICRON	35	35

F24A	F28	FNVA	FKVF	FKVH
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
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
2.15	2.65	2.90	2.25	2.65
0.90	1.20	1.30	0.96	1.20
65	75	80	67	75
0.3%	0.3%	0.3%	0.5%	0.3%
1.8%	1.4%	1.5%	1.0%	1.5%
n/a	n/a	n/a	n/a	n/a
125	70	55	8600	5000
70	45	45	920	600
70	70	80	80	80
154	180	195	158	172

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 2 rpm*, POISE	85	135		
BROOKFIELD 20 rpm*, POISE	55	90		
SEVERS**	90	90		
GELATION TEMPERATURE, F	152	142		

See <u>www.fpcusa.com/pvc/specialty</u> for our complete dispersion PVC products portfolio.

### **Our Commitment**

Formosa Formolon<sup>®</sup> polyvinyl chloride quality and consistency, together with our technical service, provide excellent value and produce components that consistently perform as required.

- Quality and Consistency We will deliver resins that meet or exceed customers' requirements.
- Performance Help customers produce consistent, valued components that perform to specifications for durability, appearance and safety.
- Value Provide excellent per unit component value from resin grade selection, purchase and delivery to optimized processability and final component production.
- Technical Service Provide top-notch, responsive technical service that develops prompt, accurate solutions.

### Your Partner for Polymer Solutions

With corporate headquarters in Livingston, New Jersey, Formosa Plastics Corporation, U.S.A. owns and operates three vertically integrated chemical manufacturing subsidiaries located in Delaware City, Detaware; Baton Rouge, Louisiana; and Point Comfort, Texas. Through affiliated facilities located in Ningbuo (China), Mailiao (Taiwan) and Linyuan (Taiwan), we can meet international demands.

Our business operations include the production of polyethylene, polypropylene, suspension and dispersion polyvinyl chloride, chlor-alkali and olefins.

For more information about Formosa Plastics' products or to discuss a custom application for a no obligation quote, visit **www.fpcusa.com** or speak with your company representative directly by calling **888.372.8723**.

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