



Formosa Plastics®

Formolon® Polyvinyl Chloride Suspension PVC Products

Quality, Value and Performance

Discover Formolon® Suspension Polyvinyl Chloride (PVC) Compounds and Resins

When success is essential, Formosa is your quality choice.

Formosa Plastics Formolon® Suspensions PVC compounds and resins are some of the most versatile products in the market. They can produce everything from rigid pipes to flexible films. They can produce smooth textures for windows and fencing to grain-like textures for decking or luxury vinyl tiles.

As a leading global resin manufacturer, Formosa Plastics works actively to develop resins for tomorrow's application requirements. With operations in Point Comfort, Texas and Baton Rouge, Louisiana, we are able to service our global customer base.

Formolon® Suspension Products

Suspension Compounds

Suspension Resins

Suspension Resin Properties and Attributes

- Medium-low molecular weight resins
- Low gels
- Exceptional early color heat stability
- Low fines level suitable for rigid dry blends
- Outstanding lot-to-lot consistency
- Wide range of inherent viscosities ranging from 0.68 to 1.1
- K-values ranging from 56 – 73
- ISO 9001 and ISO 14001 certified manufacturing



Major End-Use Applications

- Pipes
- Siding
- Fencing
- Decking
- Luxury Vinyl Tile
- Windows
- Flexible Films
- Wire and Cable
- Profiles
- Medical Films
- Meat Overwrap
- Foamed Sheet

Formolon® Suspension Resins

| Properties | Units | Test Method |
|---------------------|---------------------|----------------------|
| Relative Viscosity | | |
| Inherent Viscosity | | ASTM D5225 |
| K-value | | |
| Volatiles | % | ASTM D6980 |
| Bulk Density | lbs/ft ³ | ASTM D1895 |
| | g/cc | ASTM D1895 |
| Sieve Analysis | | Malvern |
| % thru 40 Mesh | | |
| % thru 200 Mesh | | |
| Residual VCM (ppm) | | GC Head Space Method |
| Contamination Count | OCS per 100g | OCS per 100g |
| Gel Count | | GP Gel Method |
| Description | | |
| Applications | | |

Suspension Polyvinyl Chloride (PVC) Compounds and Resins



Formosa Plastics®

Products & Technical Specifications

Formolon® Suspension Compounds

| Properties | Units | Test Method | Window Profile Series | GP Compound Series | Homopolymer/Compounds | Homopolymer/Compounds |
|--|----------------------|-------------|---|--|---|---|
| | | | APW | AWS | AW02 | AW04 |
| Izod Impact, 1/8" Specimen, @23C, | ft.-lbf/in. of notch | ASTM D256 | 20 | 3 | | |
| Impact Strength | ft.-lbf/in. | ASTM D256 | | | 1.09 | 1.10 |
| Tensile Yield Strength, (PSI) | psi | ASTM D638 | 6,150 | 6,000 | 7,200 | 7,200 |
| Tensile Modulus, (PSI) | psi | ASTM D638 | 400,000 | 350,000 | 426,000 | 410,000 |
| Flexural Yield Strength, (PSI) | psi | ASTM D790 | 10,000 | 10,000 | | |
| Flexural Modulus, (PSI) | psi | ASTM D790 | 350,000 | 350,000 | | |
| Heat Deflection Temperature Under Load | °F | ASTM D648 | 163.4 | 159.8 | 165.0 | 169.0 |
| Drop Dart Impact, C-125 Impactor | | | | | | |
| @23°C | in-lb/mil | ASTM D4226 | 2.2 | | | |
| @0°C | in-lb/mil | | 2.0 | | | |
| Description | | | NSF approved MMW dry blend compound with excellent stability for consistent whiteness | Powdered compound for profiles | NSF approved MMW dry blend PVC compound with excellent stability for consistent whiteness | NSF approved MMW dry blend PVC compound with excellent stability for consistent whiteness |
| Applications | | | Profile extrusion of window lineals, fencing & other outdoor weatherable applications | Profile extrusion of indoor and non-weatherable applications | Rigid extrusion | Rigid extrusion |



| General Purpose | General Purpose | General Purpose | Pipe Grade | Rigid Extrusion | Film Extrusion | Siding Grade | General Purpose | General Purpose | General Purpose | General Purpose | General Purpose |
|--|---|---|---|---|---|---|---|--|---|--|--|
| 608 | 614 | 616K | 622 | 622E | 622F | 622S | 622R | 676 / 676H | 680/680H | 685 | 690 |
| 1.81 | 1.88 | 1.96 | 2.19 | 2.15 | 2.20 | 2.15 | 2.01 | 2.27 | 2.37 | 2.37 | 2.51 |
| 0.68 | 0.73 | 0.79 | 0.92 | 0.90 | 0.93 | 0.90 | 0.81 | 0.95 | 1.02 | 1.02 | 1.09 |
| 56 | 58 | 61 | 66 | 65 | 67 | 65 | 62 | 68 | 70 | 70 | 73 |
| 0.20 | 0.20 | 0.20 | <0.30 | 0.30 | 0.20 | 0.30 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |
| 36 | 35 | 34 | 35.6 | 35.0 | 32.0 | 36.0 | 34.0 | 32.0 | 32.0 | 32.0 | 31.0 |
| 0.57 | 0.56 | 0.55 | 0.57 | 0.56 | 0.52 | 0.58 | 0.56 | 0.52 | 0.51 | 0.52 | 0.50 |
| | | | | | | | | | | | |
| 99.9 | 99.9 | 99.9 | 99.9 | 99.9 | 99.9 | 99.9 | 99.9 | 99.9 | 99.9 | 99.9 | 99.9 |
| 5.0 | 5.0 | 6.0 | 3.0 | 4.0 | 5.0 | 3.0 | 6.0 | 4.0 | 4.0 | 3.0 | 4.0 |
| <1.0 | <1.0 | <1.0 | 1.0 | 2.0 | <1.0 | 2.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| 20.0 | 20.0 | 20.0 | 40.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |
| - | - | - | - | - | 20.0 | - | - | 10.0 | 10.0 | 16.0 | 10.0 |
| Low molecular weight (LMW) homopolymer with low gels and excellent early color stability | Medium-low molecular weight homopolymer with low gels and excellent early color stability | Medium-low molecular weight homopolymer with low gels and excellent early color stability | Medium-low molecular weight homopolymer with excellent dry flow characteristics | Medium-low molecular weight homopolymer with excellent dry flow characteristics | Medium molecular weight (MMW) homopolymer with excellent dry flow characteristics | Medium-low molecular weight homopolymer with excellent dry flow characteristics | Medium-low molecular weight low gels and early color heat stability | Medium-low molecular weight low in gels | Designed for processing powder blends due to its ability to rapidly absorb plasticizers | Suited for processing powder blends due to its ability to rapidly absorb plasticizers regardless of MW | Suited for processing powder blends due to its ability to rapidly absorb plasticizers regardless of MW |
| Injection molding, rigid calendering, bottles and flooring | Injection molding, rigid calendering, bottles, rigid foam profile and rigid sheet | Rigid calendering, rigid foam profiles and bottles | Pipe and conduit | Siding, pipe and conduit | Flexible and rigid film, wire and cable | Siding, calendering, film, rigid profile, pipe and rigid expanded profiles | Rigid and flexible calendering, rigid foam profile and bottles | Calendering, blown flexible films, medical, wire and cable, and meat wraps* (*676H only) | Flexible calendering, extrusion, medical, blown films and meat wraps* (*680H only) | Flexible extrusion, wire and cable, meat wrap and blown film | Flexible calendering, extrusion and wire and cable |

Our Commitment

Formosa Formolon® 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, Delaware; Baton Rouge, Louisiana; and Point Comfort, Texas. Through affiliated facilities located in Ningbo (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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