

Formolene[®] Polypropylene Consumer Programs

Quality, Value and Performance

Discover Formolene® Polypropylene for Consumer Programs When quality, value and performance are essential for your success, Formosa is your choice.

Formosa's injection grade polypropylene resins offer the quality you need for all aspects of the consumer products market, including Housewares, Furniture and key sub-market segments like Lawn and Garden Equipment, Crates and Specialty Containers, Games and Toys, Infant/Child Automotive Seats, and Recreational and Sporting Goods.

Formosa serves the Consumer Programs market with high quality, innovative Formolene® polypropylene resin products. Our broad, growing and ever-more sophisticated portfolio offers a full line of impact copolymer, random copolymer and homopolymer polypropylene resins with the very latest processabilty advantages.

Quality, value and performance, backed by top-notch technical service -- this is our commitment to your success.

Random Copolymer Applications

Formosa's random copolymer resins produce consistent, capable components quickly and profitably. Their inherent processability and targeted properties bring high clarity and aesthetic value to both component parts and finished products:

- Clarity and brightness produce eye-catching housewares.
- Mold and part release additives assure reliable, rapid processabilty and handling.
- Excellent organoleptics and extractables ensure consistent FDA approval.

Homopolymer Applications

Our full line of homopolymer polypropylene resins assure you the operational economics provided by:

- Full range of melt flows.
- Broad spectrum of additives for mold release, antistat and nucleation.
- Excellent organoleptics and extractables performance.



Impact Copolymer Applications

Our impact copolymer polypropylene resins provide an outstanding balance of toughness and stiffness, to achieve the long-term durability and service life needed for consumer products:

- Our latest high melt flow grades provide opportunities for cost savings from improved processing efficiencies.
- Engineered polymer structures ensure proper and reliable part consistency.

 Optimized additive formulations deliver desired processability, both at the press and in subsequent material handling operations.

Optimized Resins for Consumer Programs Applied Polymer Innovation







3435E





6575N

Products & Technical Specifications (Selected Materials)

| GRADES | 4142T | 3335E | 3435E | 3380E | 6375N | 6520N/ 2520N | 6535A/ 2535A | 6575N |
|--------------------|--|--|--|--|----------------------------------|-----------------------------|-----------------------------|--|
| MATERIAL TYPE | Homopolymer | Random Copolymer | Random Copolymer | Random Copolymer | Low Impact Copolymer | Medium Impact Copolymer | Medium Impact Copolymer | Medium Impact Copolymer |
| DESCRIPTION | High MF With Nucleation And Antistat | Advanced, Clarification And Antistat | Higher Impact, With Advanced Clarification And Antistat | Very High MF, Clarification And Antistat | Very High MF, With Nucleation | High MF, With Nucleation | High MF, With Nucleation | Very High MF, With Nucleation And Antistat |
| MELT FLOW | 35 | 35 | 35 | 80 | 75 | 20 | 35 | 75 |
| TENSILE STRENGTH | 5,700 | 4,200 | 3,800 | 4,200 | 4,200 | 3,600 | 3,200 | 3,100 |
| ELONGATION (YIELD) | 7 | 15 | 16 | 14 | 5 | 6 | 6 | 5 |
| FLEX MODULUS | 260 | 150 | 130 | 160 | 200 | 175 | 145 | 155 |
| IZOD | 0.5 | 1.2 | 1.5 | 1.1 | 1.5 | 2.7 | 2 | 2.5 |
| FDA | Y | Y | Y | Y | Y | Y | Y | Y |
| NUCLEATION | Y | Ν | Ν | Ν | Y | Y | Y | Y |

See <u>www.fpcusa.com/pp</u> for our complete polypropylene products portfolio.

Need More? Just Ask.

At Formosa, we're committed to providing you with innovative products, consistent quality, unsurpassed service and reliable on-time/every-time delivery.

Our technical teams ensure you get the products you need and the consistent quality and run performance you need every time.

Our service teams are determined to help you find ways to improve your business by optimizing performance, improving consistency and helping you to get the most out of our products.

Our private rail fleet is the largest in the industry. You can monitor the status of your orders and the exact locations of your railcar deliveries online — 24/7/365.

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

Our Commitment

Formosa Formolene® polypropylene quality and consistency, together with our technical service, provide exce 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
- Value Provide excellent per unit component value from resin grade selection, purchase and delivery to optin 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**.

The information and recommendations in this publication are, to the best of our knowledge, reliable. Suggestions concerning uses or applications are only the opinion of FORMOSA PLASTICS CORPORATION, U.S.A. and users should perform their own tests to determine the suitability of these products for their own particular purposes. However, because of numerous factors affecting results, FORMOSA PLASTICS CORPORATION, U.S.A. MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING THOSE OF MANUFACTURING AND FITNESS FOR PURPOSE, other than that the material conforms to the applicable current Standard Specifications Statements herein, therefore, should not be construed as representations or warranties. The responsibility of FORMOSA PLASTICS CORPORATION, U.S.A. for claims arising out of breach of warranty, negligence, strict liability, or otherwise is limited to the purchase price of the material. Statements concerning the use of the products or formulations described herein are not to be construed as recommending the infringement of any patent and no liability for infringement arising out of any such use is assumed.

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