Polypropylene engineered for film applications

Oriented Film
Cast Film
Blown Film
Heat Sealable Polymers
Total Petrochemicals USA, Inc. has long been a recognized leader in the polypropylene film market.

Our vast range of highly innovative and easy to process resins have made polypropylene a preferred material for use in the manufacture of a wide variety of film products. Versatility and processability have made our polypropylene the material of choice for production of films for use in the packaging of convenience products, high-impact labeling media, carton-sealing tapes and specialty healthcare items.

With production facilities in North America, Europe and Asia Total Petrochemicals ranks as the third largest polypropylene producer worldwide. Our La Porte plant near Houston, Texas is the largest single-site polypropylene facility in the world, producing more than 2 billion pounds of high quality polypropylene per year.

One of our strengths is our size, but equally important we are known for our technological leadership and our superior customer service. With major research and technology facilities in North America and Europe, we are at the forefront of polypropylene catalyst and process technology. Coupled with our responsive customer service, delivery lead time and product reliability, Total Petrochemicals is the supplier of choice in the film industry.
Oriented Film

Over the years producers of oriented films have come to know the ease of use, consistent quality and wide range of polypropylene resins produced by Total Petrochemicals. Combined with our dedication to technology and improved manufacturing processes our range of products provide for efficient processing on tenter-frame and double-bubble oriented film equipment at high production speeds. Total Petrochemicals resins are successfully used to produce sparkling, high- clarity films for over-wrap packaging, bright-white opaque films as labeling media and brilliant metallized film for snack food packaging.

Cast Film

Innovative research and manufacturing has resulted in an unsurpassed selection of unique Total Petrochemicals polypropylene resins for use in extrusion of cast films. Ideally formulated homopolymer and random copolymer products are available for use in the manufacture of high clarity film with desired surface attributes. High crystallinity and impact copolymer polypropylene products are available to meet special film and packaging requirements. Our leadership in single-site metallocone catalyzed polypropylene has resulted in the development of products of low and high melt flow rates that enable very high-speed extrusion of thin films with improved stiffness, extraordinary clarity and enhanced barrier properties.

Blown Film

Total Petrochemicals recognizes the benefits that polypropylene can offer over other common materials for the extrusion of blown film products and has developed materials for specialized applications. The outstanding toughness and strength of these resins coupled with virtually gel-free quality and high melting point make our impact copolymers an excellent choice for new blown film applications.

Heat Sealable Polymers

Key to the success of Total Petrochemicals in films is the breadth of materials produced that includes heat sealable polymers for use in oriented, cast and blown film applications. Our random copolymer resins are the long established standards for dependable heat seal performance. This proprietary technology has been dramatically enhanced with the introduction of single-site metallocone catalysts that enables us to produce metallocone-isotactic propylene polymers that form films with lower heat-sealing properties and exceptional surface attributes. Our syndiotactic propylene polymers also offer advantageous benefits when combined with other heat sealable materials.
Our Polypropylene is available in a wide variety of grades, designed to fit your exacting applications. Listed below is a small sample of our highly successful materials that have been tailored for the film industry.

**3371**
3371 is a true homopolymer resin developed especially for superior performance in tenter-frame, oriented film production for the manufacture of tapes and films. This polymer has extremely low residuals for improved color stability and clarity.

**M3865**
M3865 is an excellent metalloocene single-site catalyzed product for the production of clear, crisp cast polypropylene thin-gauge films. With narrower molecular weight distribution properties it exhibits a cleanliness, uniformity, and efficiency that is unmatched.

**4170**
4170 is an impact copolymer with good melt strength recommended for extrusion blown film processes for the manufacture of heavy-duty, higher temperature requirement films, and matte-finish labels. 4170 produces films with high dart impact strength, high heat resistance and excellent processability.

**Z9450**
Z9450 is recommended for use in non-oriented film processes for the manufacture of packaging films that require improved optical and impact properties and with its low melting point (129°C), as a heat seal layer for oriented films.

**mRCP**
A family of isotactic metalloocene random propylene polymers with excellent heat seal performance and outstanding optical properties. Recommended for use as a skin layer in co-extruded biaxially oriented films due to its low melting point and beneficial seal properties.

**1471**
1471 is a syndiotactic form of copolymer polypropylene with lower crystallinity and a narrower molecular weight distribution. Has a low melt temperature (130°C), is more viscous, and takes longer to set-up. Offers excellent clarity and room temperature impact. Market applications include shrink label films, compound modifiers, and viscosity enhancers.

**Research and Technology**
The Research and Technology Center is dedicated to keeping you and Total Petrochemicals at the forefront of polypropylene technology. Our pilot plant, applications laboratory, and analytical laboratory are seamlessly integrated to be responsive and innovative. Here we can provide solutions by testing ideas, evaluating resins, and developing new products. Our focus on product development and customer support yields results.

Your Technical Service representative can help you determine the best resin for your application. This determination can be based on physical testing of customer samples, in-depth resin analysis, in-house compounding, and end-use processing. Our versatility allows commercial production conditions to be emulated using both full-scale industrial machines and sophisticated lab lines. Cast, oriented and blown film processes can be studied in detail to satisfy specific customer requirements.

The real strength of the Research and Technology Center is our people. As the technical liaison between you and our company, dedicated Technical Service Specialists can help you create and optimize product formulations, troubleshoot problems at your facility and assist in developing your ideas. Through our Technical Service you have the coordination, expertise and direct contact you need to help you develop your growing market.
CUSTOMER SERVICE

Total Petrochemicals uncompromising commitment to service adds immeasurable value to our line of products. Our selection of high quality resins is extensive and no other supplier compares with our brand of customer service. Our support for each customer is ongoing - from initial product trial, through successful commercialization, and on to full optimization. Highly experienced Customer Service Representatives excel at understanding and responding to your product needs and your critical deadlines. Centrally located in Houston, Texas, this team of skilled professionals is integral to our approach of offering not just products, but solutions.
Corporate Office USA
PO Box 674411, Houston, Texas 77267-4411
877.428.6346   800.344.3462

Corporate Office Europe
Zone Industrielle, C-7181 Feluy, Belgium
32.64.51.4111

Email: polypropylene@total.com
Web: www.totalpetrochemicalsusa.com