

## VERSIFY<sup>™</sup> 2400 Elastomer

VERSIFY<sup>™</sup> 2400 Elastomer is a resin with a low melt flow rate making it suitable for extrusion and calendering processes. It has excellent compatibility with PP and is useful agent to bring softness and temperature performance.

Note: VERSIFY 2400 Elastomer complies with US FDA FCN 449. When used unmodified for food contact applications, this resin will comply with the Federal Food, Drug and Cosmetic Act as a food contact substance (FCN) as a result of a pre-market notification with an effective date of October 20, 2004 under FDN 449. this notification allows for use of this product as articles used in contact with all food types under Condition of Use A through H, as described in US FDA Table 2 of 21 CFR § 176.170(c). Consult the regulations for complete details.

The composition of this product complies with the requirements for use in contact with food of the EU-Directive 2002/72/EC. Contact a Dow Sales Office to obtain a detailed food compliance letter for this product.

## Main Characteristics

- Pellet
- Low Melt Flow Rate
- Free Flowing

- Compatible with PP
- Soft polypropylene
- Low Crystallinity

- Applications
- Membranes
- Highly filled compounds

Extrusion Applications

## **Product Characteristics**

Properties	Test Method	Units	Value	Method	Units	Value
Physical						
Melt Flow Rate (230°C, 2.16kg)	ASTM D 1238	g/10 min	2	ISO 1133	g/10 min	2
Density	ASTM D 792	g/cm <sup>3</sup>	0.8585	ISO 1183	g/cm <sup>3</sup>	0.8585
Mechanical <sup>(2)</sup>						
Hardness, Shore A	ASTM D 2240	-	68	ISO 868	-	60
Hardness, Shore D	ASTM D 2240	-	18	ISO 868	-	14
Tensile Strength at Yield	ASTM D 638	psi	270	ISO 527-1.2	Мра	1
Ultimate Tensile Strength	ASTM D 638	Psi	858	ISO 527-1.2	Мра	3
Tensile Elongation at break <sup>(3)</sup>	ASTM D 638	%	647	ISO 527-1.2	%	> 650
Flexural Modulus (1% Secant)	ASTM D-790	psi	2,000	ISO 178	Мра	6.3
Thermal						
Total Crystallinity	Dow Method	%	7			
Glass Transition Temperature	Dow Method	°F	-27	Dow Method	°C	-33
Optical <sup>(4)</sup>						
Clarity	ASTM D 1746	%	72			
Haze	ASTM D 1003	%	6			

(1) Typical values, not to be construed as specifications. Users should confirm results by their own tests.

(2) Measured in compression molded samples, aged two weeks (+ 3 days) prior to testing.

(3) Strain rate of 50mm/min.

(4) Measured in injection molded specimens (2 mm thickness).

Product Stewardship	The Dow Chemical Company and its subsidiaries (Dow) has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our Product Stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our Product Stewardship program rests with each and every individual involved with Dow products — from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.						
Customer Notice	Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.						
Dow Medical Application Policy	<ul> <li>Dow will not knowingly sell or sample any product or service ("Product") into any commercial or developmental application that is intended for:</li> <li>a. permanent (Long term) contact with internal body fluids or internal body tissues. Long term is a use which exceeds 72 continuous hours (except 30 days for PELLETHANE™ polyurethane elastomers);</li> <li>b. use in cardiac prosthetic devices regardless of the length of time involved; (Cardiac prosthetic devices include, but are not limited to, pacemaker leads and devices, artificial hearts, heart valves, intra-aortic balloons and control systems, and ventricular bypass assisted devices);</li> <li>c. use as a critical component in medical devices that support or sustain human life; or</li> <li>d. use specifically by pregnant women or in applications designed specifically to promote or interfere with human reproduction.</li> <li>Additionally, all Products intended for use in pharmaceutical applications, other than pharmaceutical packaging, must pass the current Pharmaceutical Liability Guidelines.</li> <li>For the products sold by the Plastics Portfolio, new business opportunities require a business assessment prior to sale or sampling of Dow products.</li> <li>Authorized distributors and resellers will adhere to this medical policy.</li> <li>The Dow Chemical Company does not endorse or claim suitability of their products for specific medical applications. It is the responsibility of the medical device or pharmaceutical manufacturer to determine that the Dow product is safe, lawful, and technically suitable for the intended use. DOW MAKES NO WARRANTIES, EXPRESS OR IMPLIED, CONCERNING THE SUITABILITY OF ANY DOW PRODUCT FOR USE IN MEDICAL APPLICATIONS.</li> </ul>						
Disclaimer	NOTICE: No freedom from infringement of any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, the Customer is responsible for determining whether products and the information in this document are appropriate for the Customer's use and for ensuring that the Customer's workplace and disposal practices are in compliance with applicable laws and other governmental enactments. Dow assumes no obligation or liability for the information in this document. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.						
	determined; (2) analysis of hazards and caution in handling and use are required; and (3) there is greater pote for Dow to change specifications and/or discontinue production.						
Additional Information	North America U.S. & Canada: Mexico:	1-800-441-4369 1-989-832-1426 +1-800-441-4369	Europe/Middle East	+800-3694-6367 +32-3-450-2240			
	Latin America Argentina: Brazil: Colombia: Mexico:	+54-11-4319-0100 +55-11-5188-9222 +57-1-319-2100 +52-55-5201-4700	South Africa Asia Pacific	+800-99-5078 +800-7776-7776 +60-3-7958-3392			
www.dowplastics.com	Published January 2007						

