

K0061 Europe 12/11/2012

KRATON® G1651 E Polymer

Data Document

Identifier: K061DDe15E

Description

Kraton G1651 E is a clear, linear triblock copolymer based on styrene and ethylene/butylene, S-E/B-S, with bound styrene of 31.5% mass. It is supplied from Europe in the physical forms identified below.

- Kraton G1651 EU supplied as undusted fluffy crumb
- Kraton G1651 ES supplied as fluffy crumb dusted with amorphous silica

Kraton G1651 E is used as a base material for compound formulations and as a modifier of thermoplastics. The inherent stability of the mid block suggests the use of this product in applications that must withstand weathering and high processing temperatures.

Sales Specifications						
<u>Property</u>	Test Method	<u>Units</u>	Sales Specification Range	<u>Notes</u>		
Polystyrene Content	KM 03	%m	30.0 TO 33.0			
Total Extractables	KM 05	%m	<= 1.6			
Antioxidant Content	KM 08	%m	>= 0.03			
Volatile Matter	KM 04	%m	<= 0.5			
Ash (ES)	ISO 247	%m	0.3 TO 0.5			

Typical Properties (These are typical values and may not routinely be measured on finished product)							
Property	Test Method	<u>Units</u>	<u>Typical Value</u>	<u>Notes</u>			
Solution Viscosity	KM06	Pa.s	1.5	а			
Specific Gravity	ISO 2781		0.91				
a Measured on 10% m/m solution in toluene at 25°C using a Brookfield viscometer LVT model							

Packaging

(R) KRATON and the KRATON logo are trademarks owned by the KRATON Polymers Group of Companies

End Use Requirements

If the finished article is intended for use in food contact and packaging applications, toys, or human contact areas, manufacturers of the final product should observe all relevant regulations. Some of these regulations require tests to be carried out on the final product, e.g. migration. These are the responsibility of the final product manufacturer.

Information on the food packaging clearances of individual products is available from Kraton Polymers.

Medical Devices, Healthcare and Cosmetic Applications and Trademark Usage

Kraton Polymers' products should not be used in any devices or materials intended for implantation in the human body as defined by the U.S. Food and Drug Administration under 21 CFR 812.3(d) and 21 CFR 860.3(d). No customer of Kraton Polymers, or any other party, shall, without the express written consent of Kraton Polymers for each specific, individual application, be permitted to manufacture, use, sell, process, or otherwise supply, directly or indirectly, any Kraton Product, or any compound containing or made from any Kraton Product, in any of the following end-use products or applications:

Cosmetics products, other than:

- (a) cosmetics products containing Kraton product grades designated for cosmetics use, and
- (b) products designed for the packaging or delivery of cosmetics.

For purposes hereof, a product shall be deemed a 'cosmetic product' if it satisfies the definition of cosmetic product contained in any applicable law or regulation of the United States, China or the European Union (or any member state thereof).

Drug and other pharmaceutical products, other than products designed for the packaging or delivery of drugs and other pharmaceuticals.

Medical devices, other than:

- (a) any medical device falling within the definition of either a Class I or Class II medical device, as defined in any federal law or regulation of the United States or Canada, or
- (b) any medical device falling within the definition of a Class I or Class II(a) medical device, as defined by any applicable regulation of the European Union or any member state thereof.

No customer of Kraton Polymers, or any other party, shall be permitted to use any of Kraton Polymer's trade names, trademarks, logos or other similar identifying marks or characteristics for the manufacture, sale, or promotion of its cosmetics, drugs, pharmaceutical products/materials, or medical devices.

Please contact your Kraton Polymers Sales Representative for more details before using our products in these specific applications.

Safety and Handling Precautions

Read the Safety Data Sheet carefully and thoroughly before beginning any work. Additional information relating to the health, safety, storage, handling and processing of Kraton Polymers products can be found in "Health and Safety Aspects of Kraton D and Kraton G Polymers" (Document K0155), available from your local Sales Representative or the company website. Kraton Polymers also recommends that customers or users consult other sources of safety information, for example, the current edition of the "Code of Practice on the Toxicity and Safe Handling of Rubber Chemicals," British Rubber Manufacturers Association Limited. Kraton Polymers products and compounds can accumulate electrostatic charges when rubbed, chafed or abraded. Processing and storage equipment for use with Kraton Polymers products should provide a means of dissipating any charges that may develop.

When processing Kraton Polymers products, maintain a fire watch if the material reaches 225°C (437°F) for Kraton IR and Kraton D (polymers and compounds), and 280°C (536°F) for Kraton G (polymers and compounds). The temperatures listed above are indicated only for safety reasons (risk of fire and product degradation) and are not necessarily recommended for processing. Degradation of the polymer (polymer breakdown) will start at lower temperatures depending on the specific processing conditions. Therefore, operating below these temperatures does not guarantee the absence of product degradation.

Kraton Polymers products (the neat resin or the base product) are high molecular weight polymers which are non-toxic and biologically inactive.

Warranty

The information contained in this publication is, to the best of Kraton Polymers' knowledge, true and accurate, but any recommendations or suggestions that may be made are without guarantee, since the conditions of use and storage are beyond Kraton Polymers' control. The customer understands that it shall make its own assessment to determine the suitability of a Kraton Polymers product for a particular purpose. Further, nothing contained herein shall be construed as a recommendation to use any Kraton Polymers product in conflict with existing patents. All products purchased from or supplied by Kraton Polymers are subject to terms and conditions set out in the applicable contract, order acknowledgement and/or bill of lading. Kraton Polymers warrants only that its products will meet those specifications designated therein.

KRATON POLYMERS MAKES NO OTHER WARRANTY REGARDING ITS PRODUCT, EITHER EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE; OR THAT THE USE OF SUCH INFORMATION OR KRATON POLYMERS PRODUCT WILL NOT INFRINGE ANY PATENT.

For Further Information

U.S.A Headquarters
Kraton Polymers U.S LLC
15710 John F. Kennedy Blvd.
Suite 300
Houston, Texas 77032
+1-800-4-KRATON (800-457-2866)
info@kraton.com

Asia Pacific
Room T12, 40th Floor
Shanghai World Financial Center
100 Century Avenue, Pudong New Area
Shanghai 200120,
PR China
+86 21 2082 3888
info.cn@kraton.com

Europe, Middle East, Africa John M. Keynesplein 10 NL - 1066 EP Amsterdam The Netherlands +31 (0) 20 201 7697