# KRATON

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# KRATON<sup>TM</sup> MD6684 GS-N Polymer

**Data Document** 

Identifier: K472DDf18E

#### Description

Kraton MD6684 GS-N is a clear linear triblock copolymer based on styrene and ethylene/butylene (S-E/B-S) with bound styrene of 32.9% mass and 1% maleic anhydride. It is supplied from Eruope as identified in the grade nomenclature below. Kraton MD6684 GS-N is used as a modifier of polymers. It is also suitable as an ingredient in formulating compounds for footwear applications and may be used in formulating adhesives, sealants and coatings.

Note: This Kraton polymer product is a development product. Thus, its properties and chemical composition may change based on  $market feedback. \ Kraton \ Polymers \ reserves \ the \ right to \ change \ specifications \ and/or \ discontinue \ production \ of \ the \ product.$ 

Sales Specifications							
Property	Test Method	<u>Units</u>	Sales Specification Range	Notes			
Extract in Methanol	OTHR	%w	<sub>≺</sub> = 0.20				
Volatile Matter, 3h/110°C		%w	<sub>≼</sub> = 0.20				
Maleic anhydride, Bound	OTHR	%w	0.95 TO 1.15				

Typical Properties (These are typical values and may not routinely be measured on finished product)						
Property	Test Method	<u>Units</u>	Typical Value	Notes		
Ash	ISO 247	%mass	1.0	a		
Specific Gravity	ISO 2781		0.91	a		
Polystyrene Content	KM03	%m	31.4	a		
Hardness, Shore A	ISO 868	Shore A (10 sec)	55	b		
Tensile Strength, TD	ISO 37	MPa	8	b		
Tensile Strength, MD	ISO 37	MPa	6	b		
Color, Yellowness Index	ASTM E313		20	С		
Elongation at Break, MD	ISO 37	%	580	b		
Melt Flow Rate, 230°C/5kg	ISO 1133	gms/10 min.	20	b		
a Measured on the base polymer before functionalisation						

- Measured on a test compound formulation (100phr polymer, 100phr oil and 40phr polypropylene)
- Measured on MD6684 GS

## Packaging

Kraton Polymers are available in a number of different package types. For information specific to this grade, please contact your local

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#### **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.

#### Legal Disclaimer

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