



K0097
North America
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KRATON™ D1116 Polymer

Data Document

Description

KRATON™ D1116 is a clear, branched copolymer based on styrene and butadiene, with a polystyrene content of 23%. It is supplied from North America in the physical form identified below. The product code is N7446 and the Material Safety Data Sheet number is 2318.

- D1116-16 supplied as a dusted porous pellet.

KRATON D1116 is used as a modifier of bitumen and polymers. It is also suitable as an ingredient in formulating compounds for footwear applications and may be used in formulating adhesives, sealants and coatings.

Sales Specifications

Property	Test Method	Units	Sales Specification Range
Polystyrene Content	BAM 919	%w	21.2 - 24.4
Volatile Matter	BAM 907	%w	≤ 0.7
Total Extractables	BAM 905	%w	≤ 1.0
Dust Content ^a	BAM 908	%w	0.15 - 0.35
Solution Viscosity ^b	BAM 922	cps	2,000 - 3,000
Antioxidant Content ^c	BAM 929	%w	0.14 - 1.0
^a Talc			
^b 20%w toluene solution at 25°C			
^c BHT			

Typical properties (These are typical values and may not routinely be measured on finished product.)

Property	Units	Typical Value
Tensile Strength ^{a,b}	psi	4,600
300% Modulus ^a	%	350
Elongation ^a	%	900
Hardness ^c	Shore A	63
Specific Gravity	gm/cc	0.94
Melt Index, 200°C, 5 Kg	gm/10 min.	<1
Styrene/Rubber Ratio	%	23/77
Diblock Content	%	16
^a ASTM D-412		
^b Typical properties determined on film cast from toluene solution		
^c Typical values on polymer compression molded at 300°F		

Packaging

KRATON Polymers are available in a number of different pack types. For information specific to this grade please contact your local KRATON Polymers representative.

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End Use Requirements

If the finished article is intended for use in contact with food or in pharmaceutical applications, toys, and other human contact areas the relevant regulations should be observed. Detailed information is available from the supplier.

For food packaging, manufacturers of the final product should ensure that all ingredients used comply with the regulations. It should be noted that 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.

Restriction on Medical/Healthcare Applications

DO NOT USE KRATON™ POLYMERS PRODUCTS IN ANY DEVICES OR MATERIALS INTENDED FOR TEMPORARY OR PERMANENT IMPLANTATION IN THE HUMAN BODY. THE KRATON POLYMERS BUSINESS ALSO RESTRICTS THE USE OF ITS PRODUCTS IN OTHER MEDICAL/HEALTHCARE APPLICATIONS.

Please contact your KRATON Polymers Sales Representative for more details.

THE KRATON POLYMERS BUSINESS HAS NO SPECIFIC EXPERTISE IN THE MEDICAL/HEALTHCARE MARKET OR APPLICATIONS and does not intend to perform testing, clinical studies or other investigations of the suitability of its products for specific medical/healthcare applications. KRATON Polymers products are generally manufactured for use in a variety of commercial applications.

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Each customer or user of KRATON Polymers products is solely responsible for determining the suitability of the materials they select for the intended purpose. With regards to medical/healthcare applications, each customer or user must conduct their own studies, registrations, and other related activities to establish the safety and efficacy of their products.

Safety and Handling Precautions

Read the Material Safety Data Sheet for KRATON Polymer products carefully and thoroughly before beginning any work with this product. Additional information relating to Health, Safety, Storage, Handling and Processing can be found in the KRATON Polymer HSE Fact Sheet (ref. K0155), available from your local KRATON Polymers representative.

KRATON Polymers and compounds can accumulate electrostatic charges when rubbed, chafed or abraded. Equipment should provide a means of dissipating any charges that may develop. Processing of KRATON Polymers and compounds in high shear equipment can cause the temperature to rise. Do not allow the temperature to exceed 225-230°C (437-446°F) for KRATON D Polymers and compounds and 280-285°C (536-545°F) for KRATON G Polymers and compounds. Maintain a fire watch if these temperatures are reached. KRATON Polymer products (the neat resin or the base product) are high molecular weight polymers which by all accounts are non-toxic and biologically inactive.

Warranty

The information contained in this publication is, to the best of our knowledge, true and accurate, but any recommendations or suggestions which may be made are without guarantee, since the conditions of use are beyond our control. Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents covering any material or its use.

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