K0088 North America 9/29/2008	Kraton® G7820 Compound	Data Document

Identifier : K088DDc08U

Description

Kraton G7820 is an easy processing, general purpose 91 Shore A hardness material designed for a wide variety of applications. It is supplied from North America in the physical forms identified below.

- G7820-1001 supplied as a natural pellet
- G7820-9001 supplied as a black pellet

Sales Specifications

Property	Test Method	Units	Sales Specification Range	Notes
Hardness, Shore A	BAM 1003		85 TO 95	
Specific Gravity	BAM 1014		1.11 TO 1.17	

Packaging

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

Kraton G7820 can be processed by injection molding, extrusion, thermoforming, and other thermoplastic fabricating techniques.

Typical starting conditions for a reciprocating screw injection molding machine are as follows:

Barrel temperatures, deg.F	
Rear	380 - 400
Front	400 - 420
Nozzle	420 - 450
Mold temperature, deg.F	80 - 150
Injection pressure, psig	500 - 700
Back pressure, psi	100 - 200
Injection speed	Medium to Fast

These values are intended only as guidelines, and the optimum conditions will vary form machine to machine.

Normal mold shrinkage for Kraton G7820 is about 0.011 in/in in the direction of flow.

Since Kraton G7820 conducts heat well compared to polyolefins, molded parts cool quickly and realtively short cycle times are obtained.

Scrap is 100% recyclable. For best results, no more than 25% of reprocessed Kraton compound should be used in a blend.

Polystyrene, polypropylene, or poly(ethylene-vinyl acetate) color concentrates can be used to color Kraton G7820.

Property	**Test Method**	**Units**	**Typical Value**
Tensile Strength*	ASTMD-412	psi	1,750
300% Modulus*	ASTM D-412	%	900
Elongation*	ASTM D-412	%	650
Tear Strength	ASTM D-412, Die C	pli	280
Compression Set	ASTM D395B		
22 hrs/23 degC		%	27
22 hrs/70 degC		%	64
Heat Aging**, 168 hrs/150 degC	ASTM D573		
Tensile Strength, % retention		%	+85
Elongation, % retention		%	+80
Hardness, Shore A, change			+1
Ozone Resistance, (100 pphm/72 hrs/38 degC, 7X magnification)	ASTM D518/1149		No cracking
Brittleness	ASTM D746		-52
Burn Rate***	FMVSS302/SAE J369	in/min	2.2

*Measured on compression molded slabs
**The long term upper service temperature is greater than 125 degC.
***Determined on 4" x 14" x 0.050" plaques.

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, 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).
Kraton Polymers products may, in certain circumstances, be used in the following products or applications with prior written approval for each specific product or applicaton:

a. Cosmetics (exclusive of packaging or delivery applications).
b. Drugs and other Pharmaceuticals (exclusive of packaging or delivery applications).

Kraton Polymers trade names, trademarks, logos or other similar identifying characteristics should not be used in the manufacture, sale, or promotion of cosmetics, drugs, and pharmaceutical products or other meical/healthcare applications or materials.
Kraton Polymers has no specific expertise in these markets and applications, and does not intend to perform testing, clinical studies or other investigations of the suitability of its products for specific applications.
Each customer or user of Kraton Polymers products is solely responsible for determining the suitability of the materials it selects for the intended purpose and acknowledges that it has not relied on any representations of Kraton Polymers regarding suitability for use in its intended cosmetics, drugs, pharmaceutical products or materials.
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 Practie 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.
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