The latest generation TPE polymer chemistry meets soft-touch haptics and vehicle weight savings while using a preferred conversion method: injection molding.

Kraton™ Injection Molding Soft Skin (IMSS) technology enables the injection molding of large, thin-walled soft skin parts, including instrument panel skins as thin as 0.8mm. Kraton IMSS can be used on standard equipment and under normal processing conditions, using both skin-only and over-molded injection molding processes.

The IMSS product’s foundation is the use of Kraton™ TPE technologies and product support from Kraton’s technical team, the backbone of this new innovation. IMSS includes many performance benefits such as very high flow properties for thin-wall molding; excellent cold temperature flexibility, even after long-term heat aging and weatherometer testing; aesthetically-acceptable soft surface without the need for painting; and minimal plasticizer loading, resulting in globally-acceptable VOC and odor performance.

Kraton IMSS products look and feel great in applications such as instrument panels, trim panels and center consoles. It also supports environmentally-responsible initiatives like vehicle lightweighting and recyclability with the ability to reuse scrap and production trim waste.

**FEATURES**

- Injection moldable soft skin solution
- New high melt flow (200 MFR) Kraton SEBS-based TPE technology
- Lower density than current materials
- Improved abrasion resistance/durability
- Cold temperature flexibility
- Enables soft touch haptics
- No cross linking, phthalate free* and low plasticizer content
- Very low oil content, resulting in consistent matte gloss and no visible weld lines on grained class “A” surfaces

(*) Based on our knowledge of the product composition and manufacturing process of our polymers, Phthalates are not intentionally added as part of the manufacturing process nor do we routinely analyze for these substances.

**BENEFITS**

- System level cost savings (IM vs. Slush)
- Enables the ability to injection mold large thin-walled parts
- Enables vehicle weight savings
- No coating required to meet OEM specifications
- Safe airbag deployment
- Improved perceived quality
- Improved aging, fogging, VOC and odor performance
- Meets OEM performance specification without the need for painting of the class “A” surface
Properties | Method | Kraton™ IMSS TPE | PVC | TPO
--- | --- | --- | --- | ---
Shore A Hardness (15 sec) | ASTM D2240 | 70.80 | 69 | 87
Specific Gravity (g/cm³) | ASTM D792 | 0.9 | 1.2** | 0.95**
Tensile Strength (MPa) | ASTM D412 | 6.8 - 13.0 | 10.2 | 11.8
Elongation @ Break (%) | ASTM D412 | 627 - 951 | 469 | 419
Tear Strength (N/mm) | ASTM D624 | 27.7 - 57.4 | 43.3 | 80.9
Abrasion Resistance | CS10, 250 Cycle | No Wear | No Wear | No Wear
Scuff Resistance | SAE J365, Knife A | No Wear | No Wear | No Wear
Coefficient of Friction | ASTM D1894 | 0.39 - 1.0 | 0.84*** | 0.3***
MFI 190°C, 2.16Kg (g/10min) | ASTM D1238 | 36 - 177 | -- | --
MFR 230°C, 2.16Kg (g/10min) | ASTM D1238 | 128 - 514* | -- | --
Heat Aging (1000hrs - 120°C) | ISO 188 | | | |
Elongation Change (%) | ASTM D412 | -6.1 to -22.7 | 5.0 | -10.1
Weathering (Color Change ΔE) | FLTM BO 116-1 | <1 | <1 | <1

* Based on Kraton® IMSS Grades: KICH-14-044, 01237-006, -010 and MD6743
** Based on Manufacturer’s Technical Data Sheet
*** Reading taken on grained surfaced
a MFR readings are not accurate due to low viscosity of the compound at this temperature

Kraton Corporation (NYSE:KRA)
For more information, visit our website at www.kraton.com or email info@kraton.com

U.S.A. Headquarters
Houston, Texas

Asia Pacific
Shanghai, China

Europe, Middle East, Africa
Almere, The Netherlands

India/South East Asia
Mumbai, India

South America
Paulinia, Brazil

LEGAL DISCLAIMER

Kraton Corporation and all of its affiliates, including Kraton Chemical, believe the information set forth herein to be true and accurate, but any recommendations, presentations, statements or suggestions that may be made are without any warranty or guarantee whatsoever, and shall establish no legal duty on the part of any Kraton affiliated entity. The legal responsibilities of any Kraton affiliate with respect to the products described herein are limited to those set forth in Kraton’s Conditions of Sale or any effective sales contract. NOTE TO USER: by ordering/receiving Kraton product you accept the Kraton Conditions of Sale applicable in the region. All other terms are rejected. Kraton does not warrant that the products described herein are suitable for any particular uses, including, without limitation, cosmetics and/or medical uses. Persons using the products must rely on their own independent technical and legal judgment, and must conduct their own studies, registrations, and other related activities, to establish the safety and efficacy of their end products incorporating any Kraton products for any application. Nothing set forth herein shall be construed as a recommendation to use any Kraton product in any specific application or in conflict with any existing patent rights. Kraton reserves the right to withdraw any product from commercial availability and to make any changes to any existing commercial or developmental product. Kraton expressly disclaims, on behalf of all Kraton affiliates, any and all liability for any damages or injuries arising out of any activities relating to the use of any information set forth in this publication, or the use of any Kraton products.

*KRATON and the Kraton logo are either trademarks or registered trademarks of Kraton Corporation, or its subsidiaries or affiliates, in one or more, but not all countries.