



MD1672 NEXT-GENERATION SEBS POLYMER

ADVANCING OIL-FREE TPS FORMULATIONS WITH SUPERIOR PERFORMANCE

MD1672 is a next-generation Kraton SEBS polymer developed to enable oil-free thermoplastic elastomer (TPS) formulations with improved performance and regulatory alignment. Designed to meet the evolving demands of consumer and medical applications, MD1672 delivers a step change in compression set, barrier properties, and extractables performance compared to traditional oil-based TPS systems.

By eliminating the need for an oil additive in a TPS compound formulation, MD1672 enables cleaner, performance driven formulations. The material supports compliance with stringent regulatory requirements, while also improving processing efficiency and sustainability outcomes.

BENEFITS

- ▶ Improved product durability
- ▶ Recyclable design
- ▶ Odor-free solution
- ▶ Minimal fogging

FEATURES

- ▶ Oil-free formulation enabling zero oil bleed potential
- ▶ Improved compression set performance across temperature ranges
- ▶ Low fogging and low VOC emissions
- ▶ Enhanced barrier properties versus traditional oil-containing TPS
- ▶ Low leachables and extractables
- ▶ Processable by standard extrusion and injection molding



MD1672 was developed to create a new category of SEBS materials optimized for oil-free TPS formulations. It is specifically engineered to maintain or exceed the performance of traditional SEBS systems that rely on a blend of oil, polypropylene, and SEBS, while delivering durability through lower compression set and higher sealing performance.

MD1672

Property	Unit	Target Value / Range
Polystyrene Content	%m	27
Solution Viscosity, 15%**	cP	185
Hardness (10s)	Shore A	30
Yellowness Index		-2.0 to 2.0
Volatile Matter	%m	≤ 0.5
Antioxidant	%m	0.03 to 0.10



In practical formulation use, MD1672 enables TPS compounds that exhibit up to 30% improvement in compression set at room temperature and significant gains at elevated temperatures up to 120°C. It also delivers improved barrier properties, reducing permeability to gases and moisture, while lowering fogging and VOC emissions.

The result is a versatile material platform that supports applications requiring high cleanliness, durability, and regulatory compliance. MD1672 is compliant with applicable FDA and EU food contact regulations*, making it a great choice for food containers and packaging. Additionally, it is particularly well suited for consumer and medical products where low extractables, improved sealing performance, and sustainability are critical. It also offers a viable pathway to replace silicone rubber in selected applications, providing a combination of performance, processing flexibility, and cost efficiency.

** Final compliance is dependent on formulation, processing, and end-use conditions.*

*** Measure in toluene.*

KRATON CORPORATION

For more information, visit our website at www.kraton.com.

U.S.A. Headquarters
The Woodlands, Texas

Asia Pacific
Shanghai, China

Europe, Africa, Middle East
Almere, The Netherlands

India/ Southeast Asia
Mumbai, India



The information herein is for general information purposes only. While it is believed to be reliable, no representations, guarantees or warranties of any kind are made as to its completeness, accuracy, reliability, or suitability for applications or the results to be obtained therefrom.

*Kraton and the tagline "Sustainable Solutions. Endless Innovation." are trademarks of Kraton Corporation or its affiliates.

©2026 Kraton Corporation

2026.08MS-MD1672