

Polyurethanes for Molded Rubber Crumb Applications

HUNTSMAN

Enriching lives through innovation

SUPRASEC® MDI

Giving Your Products the Edge

Huntsman offers an unsurpassed array of moisture-cure polyurethane prepolymers under the SUPRASEC® MDI brand allowing you to match the right material with the proper application, thus providing our customers with optimal benefits to suit the environment.

PRODUCT APPLICATIONS

Recycled crumb rubber is a reliable material for use in molded products due to its resilience and structural properties. Molded rubber crumb products include lawn and garden edging, parking stops and many other applications. The usage levels of rubber crumbs (often from recycled rubber tires) vary by application. Molded cylinder applications contain 5-6% by weight of SUPRASEC® MDI binder, while smaller molded products can range between 3-10% by weight binder.

OVERALL BENEFITS



Strength

Rubber crumb composites can be formulated to achieve select properties such as tensile strength, flexibility, tear strength and elongation, depending on final density, mesh sizing, and binder selection.



Sustainable

Since 1990, 94% of the scrap tire stockpile has been recovered for new uses*. Ground tire rubber is used in rubber modified asphalt, landscaping and playground mulch, athletic surfaces, molded and extruded products, automotive parts, and many other applications.



Cycle Time

Production of parts in fewer steps is a key benefit to MDI-based molded rubber crumb. Faster cycle time for molded part manufacturers means less time and money spent on the assembly line.



**Source: ustires.org*

TECHNICAL PROPERTIES

AVAILABLE PRODUCTS

Product Name	Viscosity (cPs @ 25°C)	Color	Cure Speed	Description
SUPRASEC® 4420	1100	Clear	Fast	• General purpose binder
SUPRASEC® 4450	2300	Light Brown	Moderate	• High tensile strength
SUPRASEC® 4480	2500	Clear	Moderate-slow	• High elongation
SUPRASEC® 4499	1650	Light Brown	Slow	• Longest working time • Ideal for larger parts

SUSTAINABILITY GOALS



At Huntsman, we value sustainable practices and exhibit them throughout the production of our polyurethane materials. In support of the United Nations Sustainable Development Goals, we showcase the goals that are positively influenced with these products.

For more information visit sdgs.un.org/goals.



CONTACT US



Scan to Contact

For more information about polyurethanes in rubber crumb flooring or any other MDI-based solutions, please go to Huntsman.com and complete the Polyurethanes Contact Us form.

ABOUT US

Huntsman Polyurethanes is a global leader in MDI-based polyurethanes, serving over 3,000 customers in more than 90 countries. We have world-scale production facilities in the U.S., the Netherlands and China, and a global network of more than 30 downstream formulation facilities which are located close to our customers, providing highly differentiated, tailored solutions.

Huntsman Polyurethanes warrants only that its products meet the specifications agreed with the buyer. Typical properties, where stated, are to be considered as representative of current production and should not be treated as specifications.

While all the information and recommendations in this publication are to the best of our knowledge, information and belief accurate at the date of publication, NO GUARANTY, WARRANTY OR REPRESENTATION IS MADE, INTENDED OR IMPLIED AS TO THE CORRECTNESS OR SUFFICIENCY OF ANY INFORMATION OR RECOMMENDATION OR AS TO THE MERCHANTABILITY, SUITABILITY OR FITNESS OF ANY PRODUCTS FOR ANY PARTICULAR USE OR PURPOSE. In all cases, it is the responsibility of the user to determine the applicability of such information and recommendations and the suitability of any product for its own particular purpose.

NOTHING IN THIS PUBLICATION IS TO BE CONSTRUED AS RECOMMENDING THE INFRINGEMENT OF ANY PATENT OR OTHER INTELLECTUAL PROPERTY RIGHT AND NO LIABILITY ARISING FROM ANY SUCH INFRINGEMENT IS ASSUMED. NOTHING IN THIS PUBLICATION IS TO BE VIEWED AS A LICENCE UNDER ANY INTELLECTUAL PROPERTY RIGHT.

Products may be toxic and require special precautions in handling. The user should obtain Safety Data Sheets from Huntsman Polyurethanes containing detailed information on toxicity, together with proper shipping, handling and storage procedures, and should comply with all applicable safety and environmental standards.

Hazards, toxicity and behavior of the products may differ when used with other materials and are dependent on the manufacturing circumstances or other processes. Such hazards, toxicity and behavior should be determined by the user and made known to handlers, processors and end users.

SUPRASEC® is a registered trademarks of Huntsman Corporation or an affiliate thereof in one or more, but not all, countries.

© 2023 Huntsman Corporation or an affiliate thereof. All rights reserved.

Rev. May 2023