

Adhesives, Coatings and Elastomers Isocyanate Product Line 2010





Your Ace Polyurethanes Specialist for Coatings, Adhesives, Sealants and Elastomers



Huntsman Polyurethanes is among the industry leaders in the chemistry, technology and manufacture of products for the Adhesives, Coatings and Elastomers (ACE) market.

Globally Available Product Line with a Local Focus

In the ever-changing nature of the C.A.S.E. markets, it is necessary to have a supplier that can provide products no matter where manufacturing or development occurs. With Huntsman, a global manufacturer of MDI isocyanates, products are available worldwide, but they can also be customized to the nuances of the local markets.

Extensive Selection of Specialty and Standard MDI Products

Differentiation is the key within the C.A.S.E. markets and it is no different with the building blocks. Standard MDI isocyanates are available for those that desire to start from scratch with their developments. More importantly, an extensive selection of specialized products are available which have been tailored toward the various end-use applications. Each product provides advantages over the standard products that can be exploited to greater benefit.

The Ability to Provide a Custom Product

The value-added step for manufacturers and formulators is when the master batch is tailored to the specific end composition not in the production of the master batch. Huntsman can manufacture the master batch, thus saving on potential issues with material handling or storage, inventorying of multiple raw materials and overall production capacity constraints.





Formulation and Technical Assistance

For those developments requiring an additional "set of eyes" to get the desired results, an expert team of chemists is available to consult with. They have the ability to provide suggestions in the form of starting points for particular applications or to help get through specific formulation-related issues.

Quick Access to Material Samples

Speed is a necessity during the development process. Huntsman has a fully stocked sample division which can provide the desired material typically within a couple of days. For those "rush" requests, material can be sent overnight at a minimal cost.

RUBINATE®/SUPRASEC® MDI Specialty Isocyanates

Polymeric MDI

	Functionality	Specific Gravity @ 25°C	% NCO	Equivalent Weight	Viscosity (cps) @ 25°C	Description			
Standard Polymeric									
RUBINATE M Isocyanate	2.70	1.23	31.2	135	190	Standard Polymeric MDI.			
SUPRASEC 5025 Isocyanate	2.70	1.23	31.0	135	180	Low Acidity Polymeric Optimal for Controlled System Reactivity.			
Modified Polymeric									
RUBINATE 1245 Isocyanate	2.21	1.23	32.8	128	25	Polymeric MDI Modified with a High Level of Di-Iso Content.			
SUPRASEC 9615 Isocyanate NEW	2.36	1.23	32.1	131	50	Polymeric MDI Modified with a Moderate-to-High Level of Di-Iso.			
RUBINATE 1820 Isocyanate	2.47	1.23	32.0	131	70	Medium Functionality Modified Polymeric.			
RUBINATE 9016 Isocyanate	2.66	1.24	31.0	135	250	Slow-Reacting Polymeric to Provide Extended Open Times.			
High Functionality Pol	lymeric								
RUBINATE 9257 Isocyanate	2.90	1.25	31.0	135	700	Moderately-High Functionality MDI. Made to order			
SUPRASEC 9582 Isocyanate	2.93	1.25	31.0	135	800	Polymeric MDI with a Slightly Higher Functionality for Increased Rigidity.			
SUPRASEC 9602 Isocyanate	3.20	1.23	30.3	139	2000	High Functionality Polymeric for Specialty Rigid Applications. Made to order			

Monomeric MDI

	Functionality	Specific Gravity @ 25°C	% NCO	Equivalent Weight	Viscosity (cps) @ 25°C	Description
Standard Pure						
RUBINATE 44 Isocyanate	2.00	1.22	33.5	125	Solid	Pure 4,4' MDI Melting Point 38°C.
Liquid Pure						
SUPRASEC 2004 Isocyanate NEW	2.01	1.22	32.8	128	15	Pure MDI with a Higher 2,4' Isomer Content with Slight Yellow Appearance.
SUPRASEC 9150 Isocyanate NEW	2.05	1.22	33.3	126	15	Pure MDI with a Higher 2, 4' Isomer Content for Controlled Reactivity and Improved Flexibility.
SUPRASEC 9561 Isocyanate	2.10	1.21	29.3	143	36	Modified Pure MDI with Improved Storage and Handling Attributes for Manufacturing of High Performance Prepolymers. Made to order
RUBINATE 1680 Isocyanate	2.12	1.23	29.5	142	40	Uretonimine Modified Pure MDI with a Limited Shelf-Life.

To obtain a sample:

Phone: 800-662-0924 Email: sample@mindspring.com

www.huntsman.com/pu/ace PUCASE@huntsman.com

Polyurea Prepolymers

	Functionality	Specific Gravity @ 25°C	% NCO	Equivalent Weight	Viscosity (cps) @ 25°C	Description			
Low NCO									
RUBINATE 9447 Isocyanate	2.05	1.10	12.3	341	1200	Low NCO Designed for Softer Polyurea Coatings, Contains PC.			
Standard NCO									
RUBINATE 9480 Isocyanate	2.00	1.14	15.2	276	370	2,4' MDI Containing Prepolymer for Slightly Slower Reactivity for Improved Surface Appearance.			
SUPRASEC 9603 Isocyanate NEW	2.00	1.14	16.0	263	250	2,4' MDI Containing Prepolymer for Improved Physical Properties and Ease of Spray, Contains PC.			
SUPRASEC 9608 Isocyanate NEW	2.00	1.12	16.0	263	1000	2,4' MDI Containing Prepolymer, Similar to SUPRASEC 9603 but without PC.			
RUBINATE 9495 Isocyanate	2.06	1.14	15.1	278	400	Pure Based Prepolymer for Standard Polyurea Systems, Contains PC.			
RUBINATE 9009 Isocyanate	2.13	1.14	15.8	266	1200	Provide Improved Physical Properties and Quick Return-to-Service.			
High NCO									
SUPRASEC 9616 Isocyanate NEW	2.02	1.16	18.5	227	660	Increased NCO Prepolymer Developed for Harder Polyurea Coatings.			

Primers, Sealers and Polymer Concrete

	Functionality	Specific Gravity @ 25°C	% NCO	Equivalent Weight	Viscosity (cps) @ 25°C	Description			
Primers and Sealers									
SUPRASEC 9611 Isocyanate NEW	2.40	1.16	12.0	350	425	A novel One-Component (1k), VOC Exempt approach to polyurethane primers. Can be used as is or modified with catalysts, pigments or other additives.			
SUPRASEC 9584 Isocyanate	2.67	1.22	24.1	174	45	Designed for usage in Two-Component primer systems (2k), this VOC exempt product works well with Green resins, such as Castor Oil, to produce a primer on porous substrates.			
RUBINATE 9259 Isocyanate	2.67	1.23	30.2	139	210	A Chemically Modified MDI that can Readily Form an Emulsion in Water for 2-4 Hours. Produces a Non-Film Forming Coating on Concrete. Made to order			
Polymer Concrete									
RUBINATE 9041 Isocyanate	2.47	1.23	32.0	131	65	Specialized Isocyanate for Polymer Concrete. Provides a Matte Surface.			
SUPRASEC 9610 Isocyanate NEW	2.48	1.16	29.6	142	108	Modified Isocyanate with Longest Open Time and Higher Gloss Surface.			
SUPRASEC 2496 Isocyanate	2.52	1.23	31.3	134	85	Slightly Higher Functionality with a Slower Reactivity.			

MDI Isocyanate Crosslinkers for Water-Based Systems

	Functionality	Specific Gravity @ 25°C	% NCO	Equivalent Weight	Viscosity (cps) @ 25°C	Description
RUBINATE 9236 Isocyanate	2.69	1.23	30.7	137	180	Crosslinking MDI Developed to Improve Physical Properties of Water-Borne Adhesives or Coatings. Made to order
SUPRASEC 9600 Isocyanate	2.70	1.23	31.2	135	400	Modified Crosslinking MDI Designed to Maximize Build-up of Properties While Maintaining Long Pot-Life. Made to order

Moisture Cure Prepolymers

	Functionality	Specific Gravity @ 25°C	% NCO	Equivalent Weight	Viscosity (cps) @ 25°C	Description
RUBINATE 9040 Isocyanate	2.00	1.10	9.7	433	2000	Clear, Slow Curing, Flexible Binder Ideal for Rubber Crumb Applications.
RUBINATE 9272 Isocyanate	2.00	1.08	8.4	500	2500	High Elongation Prepolymer, Can be Used as a Flexibilizer for RUBINATE 9511 or RUBINATE 9234.
SUPRASEC 9577 Isocyanate	2.32	1.11	15.2	276	3300	Fast Curing, Amber Prepolymer with Improved Heat and Moisture Resistance. Made to order
RUBINATE 9511 Isocyanate	2.41	1.13	15.9	264	2300	Amber Prepolymer that Provides Excellent Tensile, Tear Strength and Bonding Characteristics.
RUBINATE 9234 Isocyanate	2.53	1.12	16.0	263	3100	Comparable Performance to RUBINATE 9511 but with an Extended Open Time.

Low and Medium Functionality Prepolymers

	Functionality	Specific Gravity @ 25°C	% NCO	Equivalent Weight	Viscosity (cps) @ 25°C	Description
Polyether Based						
RUBINATE 9271 Isocyanate	2.00	1.20	23.5	179	500	MDI Prepolymer Modified with Increased 2,4' Isomer.
RUBINATE 1790 Isocyanate	2.01	1.19	23.2	181	1050	All 4,4' Based Prepolymer.
RUBINATE 1670 Isocyanate	2.06	1.21	26.2	160	200	Uretonomine Modified Prepolymer. Made to order
SUPRASEC 2029 Isocyanate NEW	2.10	1.20	24.1	185	500	All 4,4' Based Preoplymer with Improved Low Temperature Stability.
RUBINATE 1209 Isocyanate	2.12	1.16	21.5	195	390	4,4' MDI Prepolymer for Spray Elastomers.
RUBINATE 9465 Isocyanate	2.12	1.18	22.9	183	250	Low Temperature Stable Prepolymer with Slightly Higher Functionality. Made to order
SUPRASEC 7316 Isocyanate	2.17	1.19	25.9	162	90	Suitable for the Development of Lower Density Flexible Foams.
RUBINATE 1920 Isocyanate	2.20	1.22	27.0	156	200	Higher NCO Designed for Use in Elastomers.
SUPRASEC 7507 Isocyanate	2.29	1.19	25.1	167	315	All-Around Product for the Development of Flexible Foams.
Polyester Based						
SUPRASEC 9612 Isocyanate NEW	2.01	1.18	19.0	221	1225	Polyester Based Prepolymer with High Acidity for More Flexibility in Controlling the Reaction.
RUBINATE 1234 Isocyanate	2.01	1.18	18.9	222	1250	Polyester Prepolymer with Controlled Low Acidity.

Comprehensive Technical Support and Applications Development



When it comes to polyurethane chemistry for the ACE marketplace, Huntsman Polyurethanes is your most important resource. Our experience can help you at virtually every stage of ACE product development, from formulation assistance to manufacturing.

We take a hands-on approach to problem solving at our Auburn Hills, Michigan, Technical Center with its QS-9000 approval and A2LA accredited analytical and physical testing laboratories

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HEALTH AND SAFETY:

The Safety and Health information in this product brochure does not contain sufficient detail for safe handling in all cases. For detailed safety and health information refer to the Material Safety Data Sheet for this product.

EMERGENCY CALLS:

Huntsman Emergency Response Center: 800-328-8501, 409-722-8381 CHEMTREC - Spills, Leak, Fire 800-424-9300 (in USA and Canada)

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