

Polyurethanes

Coating



A coating solution for every need

For over 50 years, Huntsman has provided innovative solutions that enhance the quality and performance of coatings used for industrial and specialty applications.

We support coatings companies looking to expand it's standard or tailored solutions that deliver great their product portfolios with new, ready-to-use systems; formulators who need specialty components with specific performance characteristics; and applicators as well as element manufacturers who require flexible, fast-curing coatings solutions to protect their products.

Whatever business area or industry you are in, we are ready to support you with the right expertise and resources, including testing and trials. No matter what you need from your coatings partner, whether it's standard or tailored solutions that deliver greater durability or flexibility, faster or slower cure times, usability in extreme environments, greater sustainability, or longer lifetimes, Huntsman has you covered.

Why choose Huntsman?



Science

Our POLYRESYST® polyurea and polyurethane systems can deliver a unique set of properties, and are the perfect choice for a wide variety of applications, including passive fire protection.



Sustainability

With POLYRESYST® bio-based system or mass-balanced MDI-based products, Huntsman offers more circular options that help you to meet your sustainability goals.



Partnership

We go the extra mile to support you with the expertise and capabilities you need for a solution that meets your specific requirements.

Engineered for your application

Huntsman's building blocks and POLYRESYST® coatings systems are developed to protect substrates used across numerous applications, industries and environments.

We provide a broad variety of options that cover the physical properties you need. In combination with proper surface preparation, this makes them ideal for all kinds of materials and nearly any application.

Our continued focus on innovation and development means that we are always expanding our portfolio to meet new customer needs. Our recent developments include bio-based coating system as well as fast curing solutions which can offer passive fire protection to many substrates.





Cutting-edge coatings technologies

Polyurea

Polyurea coatings are derived from the reaction between an isocyanate component and a blend of amine components forming urea linkages.

Typical features:

- 2K system, 100% solids
- Unlimited dry film thickness (DFT) build in one coat
- Fast reactivity (~ seconds)
- Broad temperature and humidity application window
- Excellent physical properties
- High temperature stability

Polyurethane

Polyurethane coatings are derived from the reaction between an isocyanate component and a blend of alcohol components, with a catalyst forming urethane linkages.

Typical features:

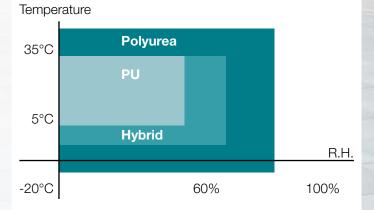
- 2K system, 100% solids
- Relative slow cure (~ minutes)
- Broad formulation range
- Lower stability at high temperature
- Wide range of physical properties
- Sensitive to humidity

Hybrid

Hybrid coatings leverage components from polyurea and polyurethane coatings formulations to combine their benefits.

Typical features:

- 2K system, 100% solids
- Unlimited dry film thickness (DFT) build in one coat
- Fast reactivity (~ seconds)
- Limited temperature and humidity application window
- Wide range of physical properties



Polyurea

Wider application window, fast reactivity, cold cure

PU

Price / quality

Hybrid

Best of both worlds. Good balance of performance, moisture insensitivity and price.

Towards sustainability

The coatings industry is transforming towards sustainability by adopting circular solutions. At Huntsman, we are committed to supporting our customer's sustainability goals with technologies that incorporate bio-based or recycled feedstocks, reducing their carbon footprint.

Our systems cure fast at ambiant or low temperature, helping to reduce energy consumption and increase throughput during the application process. Formulated without added solvent minimizes VOC and impact on air quality, human health and the environment. They exhibit long performance durability, which helps to extend product lifetimes.



Huntsman's European polyurethanes manufacturing facilities have achieved the International Sustainability & Carbon Certification (ISCC PLUS) for mass balance. Our ability to track and certify the use of bio, bio-circular, or recycled based feedstocks in our MDI production supports our customers in their sustainable sourcing strategy.

We adhere to the United Nations Global Compact and its Ten Principles and use the UN Framework of 17 Sustainable Development Goals to transform our world by 2030.



No solvent added



Long lasting buildings & infrastructure



Fast cure
Durability of performance
Extending substrate lifetime
Alternative to fossil-based feedstocks

Portfolio

		Product name	Technology	Substrate	Function	Benefits
	Coatings systems	POLYRESYST® F0570	Polyurea	Concrete, metal, composite, wood	Waterproofing	Flexibility, ability to withstand dimensional changes
		POLYRESYST® S3040	Polyurea	Concrete, metal, composite, wood	Waterproofing	Impact resistance, easy spray, CE marking
		POLYRESYST® S5010	Hybrid	Concrete, metal, composite, wood	Waterproofing	Mechanical resistance
		POLYRESYST® S6020	Polyurea	Concrete, metal, composite, wood	Waterproofing	Mechanical resistance
		POLYRESYST® H9060	Polyurea	Concrete, metal, composite, wood	Waterproofing Functional coating	Chemical resistance
		POLYRESYST® IC6005	PU	Concrete, metal, composite, wood	Intumescent coating	Passive fire protection, fast application
		POLYRESYST® S3005C	Hybrid	Concrete, metal, composite, wood	Waterproofing	Impact resistance, bio-based content
	Primers	POLYRESYST® PR1010	1K PU	Porous substrates, concrete, wood	Substrate preparation	Improved adhesion, prevention of pinholes
		POLYRESYST® PR1020	1K PU	Porous substrates, concrete, wood	Substrate preparation	Improved adhesion, prevention of pinholes
		POLYRESYST® PR2010	1K PU	Flexible substrates	Substrate preparation	Improved adhesion, prevention of pinholes
		POLYRESYST® PR3010	2K PU	All substrates	Substrate preparation	Improved adhesion, prevention of foaming and pinholes
	Prepolymers	SUPRASEC® 2008	Aromatic diisocyanate	Concrete, metal, composite, wood	MDI building block for spray applied coatings system	Ability to withstand dimensional changes
		SUPRASEC® 2054	Aromatic diisocyanate	Concrete, metal, composite, wood	MDI building block for spray applied coatings system	Mechanical resistance
		SUPRASEC® 2067	Aromatic diisocyanate	Concrete, metal, composite, wood	MDI building block for spray applied coatings system	Chemical resistance, mechanical resistance
	Building blocks	SUPRASEC® 2496	PU	Concrete	MDI building block for 2-3K self levelling flooring system	Mechanical resistance
		SUPRASEC® 2447	PU	Concrete	MDI building block for 2K self levelling flooring system	Surface finish
		SUPRASEC® 2651	PU	Concrete	MDI building block for 2-3K self levelling flooring	Surface finish, fast application
		SUPRASEC® 2656	PU	Concrete	MDI building block for 2-3K self levelling flooring	Surface finish, fast application
		SUPRASEC® 2029	PU	Concrete	MDI building block for 2K self levelling flooring	Chemical resistance, fast application



can offer the highest level of support with advice on formulation or coating selection, process equipment, support for trials and prototypes production, and on prevention of occupational health issues.

For example, we regularly work in partnership with:

- Formulators to create their own formulations
- Manufacturers and specifiers to select the right system for their application

Our lab and analytical teams can run system tests, and our application lab can present demonstrations and manufacture prototypes.

Our experts are certified spray application trainers and can also provide support for applicators. We have close relationships with equipment manufacturers and can help with equipment selection, as well as conducting on-site application tests with our spray machines.



Enriching lives through innovation

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For more information on Huntsman product portfolio for coatings solutions,

visit our website at

www.huntsman.com

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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.

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