



Polyols & Aspartics  
for Reaction with  
Polyisocyanates

Nonreactive Resins

Desmophen® Baycoll® Acclaim®  
Desmolac® Desmocoll®  
Desmomelt® Pergut®





Desmophen® Baycoll® Acclaim® Desmolac® Desmocol® Desmomelt® Pergut®

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# INVENTING VISIONS FOR YOU



As your leading partner for polyurethane chemistry, we know you are competing in increasingly challenging environments: Your customers are becoming more and more demanding in their expectations for the quality, durability, sustainability and aesthetics of products. And they have more choices. For you this means that cost pressure is rising – while innovation cycles are becoming faster and faster.

Helping you to turn this challenge into your competitive advantage is the goal that drives our daily work. We call it: INVENTING FOR YOU. But what exactly are the basic values underlying this promise? What principles enable us to improve your productivity, drive sustainability, ensure reliability and co-create future-proof businesses? First and foremost, we are

curious. Because only if we listen closely to you and ask the right questions can we respond to your individual needs with new, creative and unexpected solutions that make a real difference to you. That's why inventing for us always starts with thinking about your unmet business challenges. It requires an in-depth understanding of your needs along the whole value chain. To ensure that what we invent stands the test of time. Living up to this aspiration requires more than competencies – it calls for a corporate culture of being courageous. A culture that is defined and lived by dedicated people who cooperate to push the boundaries of invention founded on knowledge and experience. Our courage permeates our entire business – from partnerships to business models. This is also reflected in our colorful business philosophy.

We appreciate partnerships that go beyond traditional black-and-white ways of acting and thinking. An attitude of openness that invites you to co-create new things – enabling you rather than just providing. We are optimistic and resourceful in finding solutions that inspire our customers and partners.

This set of fundamental values adds up to an unrivaled performance orientation to constantly strive for something better, be it through big or small changes. A true sense of business regardless of function. And a deep commitment to delivering our promise every day. Anywhere. Again and again.

**INVENTING FOR YOU.**

## What we do

As a world-leading polymer and material science company, we inspire innovation and drive growth through profitable products and technologies that benefit society and reduce the impact on the environment.

## Who does all this?

It's our people! And the way we work together as one global team following a set of six elementary principles – value creation, sustainability, innovation, focus on people, safety and fair play. This is our formula for success.



## What this means for our Coating, Adhesive & Specialty business

### Quality & supply security

Our products are of outstanding quality and we offer supply security – worldwide.

Covestro, the world's leading manufacturer of aliphatic and aromatic polyisocyanates, offers an extensive range of raw materials and services for the coatings and adhesives industry. This allows the very latest technology to be used extremely effectively for a variety of applications.

Our global setup enables you to increase your competitive advantage.

### What we offer:

- A global network of research & development centers where our staff are dedicated to offering solutions for the coating and adhesive industry.
- A unique setup and worldwide network of state-of-the-art production sites ensuring short lead times and supply chain flexibility
- Outstanding product quality through fulfilling the requirements of state-of-the-art quality, environmental and safety (HSEQ) as well as energy management standards; we are proud of having enjoyed ISO 9001, ISO 14001, ISO 18001 and ISO 50001 certifications for many years.

Covestro is your reliable partner for polyurethane chemistry.

### Solutions to enhance your process efficiency

Nowadays, the quality demands made on industrial processes are very high. This is equally true of the cost-cutting requirements. However, both goals can be achieved by increasing process efficiency. At Covestro we have a wide range of solutions designed to enhance your process efficiency. Why not take advantage of our know-how? These solutions will benefit your bottom line.

### Sustainability

Sustainability is at the heart of the Covestro strategy. We inspire innovation and drive growth through profitable products and technologies that benefit society and reduce the impact on the environment.

Our coatings, adhesives and specialty products and solutions contribute to sustainability through:

### • Saving energy – fast and smart

Polyurethane systems represent a benchmark in productivity and process efficiency in many industries. We strive to further push the limits of efficiency by developing game-changing new solutions.

### • Reducing waste

We offer solutions such as innovative 1K technologies that enable our value chain partners to use materials more efficiently and reduce waste.

### • Cutting emissions

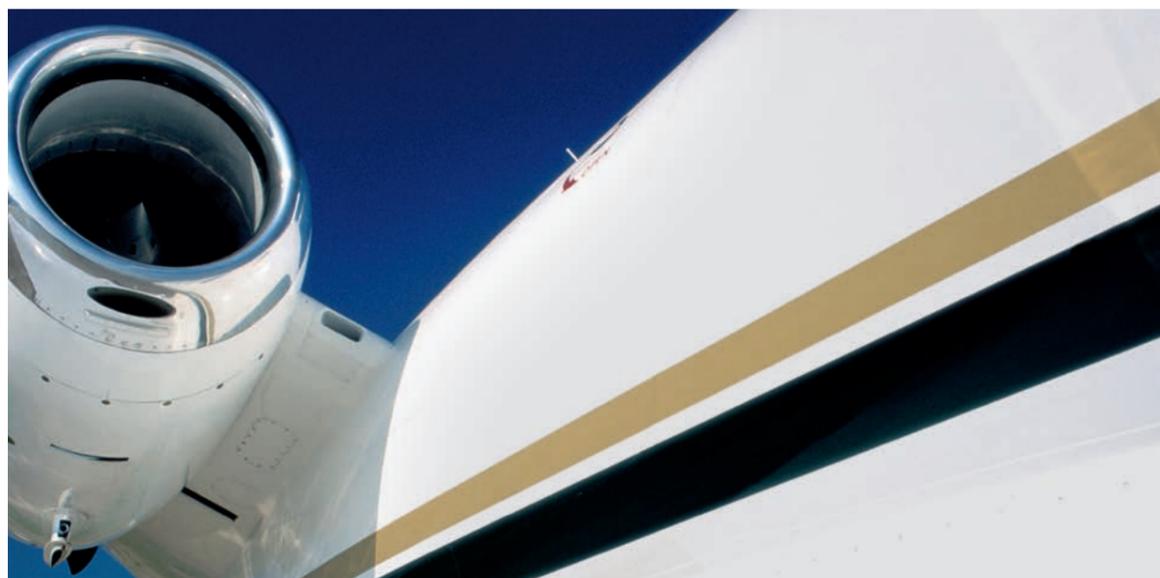
Bayhydur® and Desmodur® grades are key enablers for low-emission solutions in the coatings and adhesives industries – waterborne and high solids/solvent-free!

### • Responsible management of natural resources

Highly durable PU-based coatings and adhesives significantly extend the lifetime of a coated product and thus help to prolong resource use.

### • Closing the loop (circularity)

Through economically viable products made from biobased raw materials – with no deterioration in performance – we help our customers and value chain partners to reduce their carbon footprint and offer solutions that incorporate renewable building blocks.



# Polyols – the reaction partners

## Pioneering polyurethane chemistry

Ever since the Otto Bayer's discovery of the polyisocyanate-polyaddition process in 1937, Bayer – now Covestro – has pioneered polyurethane chemistry. 50 years ago, Bayer – now Covestro – developed the first applications using polyisocyanates for the coatings and adhesives sectors. We work closely with our customers to systematically advance the state of the art in polyurethane technology. Using market-oriented research and development, we specifically adapt our product portfolio to our customers' increasingly stringent requirements. Together with you, we want to continue our successful journey along this path.

## Acclaim® and Baycoll®

Acclaim® polyethers and Baycoll® polyesters are powerful combination partners for Desmodur®. The Acclaim® and Baycoll® portfolio has been specifically developed to meet system requirements in the field of adhesive and sealant applications. The unique impact technology enables polyether polyols to be produced in a process that is far more energy-efficient than conventional processes. This conservation of resources is a very important step in the further development of sustainable production. In addition,

extremely long-chain polyethers can be obtained that are not possible with conventional processes. These polyurethane building blocks can be used to formulate sealants with outstanding mechanical properties, for example.

## Desmophen®

Desmophen®, the other powerful combination partner for Desmodur®, has stood for reliable, high-quality polyurethane raw materials for decades. An impressive variety of product combinations allows almost unlimited design scope in the development of coating systems, casting systems and, of course, surface coatings. Our aim is to systematically expand these combination possibilities. In our product development activities, we take full account of changing market demands for greater efficiency and improved quality. This is demonstrated by the development of the Desmophen® NH polyaspartics. When combined with Desmodur® polyisocyanates, the outcome is high-quality polyurea systems that are also extremely efficient in the final application. The Desmophen® C polycarbonate diol product portfolio has been significantly expanded in response to the widespread demand for high-quality polyurethane raw materials. Desmophen® C is regarded in such applications as a formulation component

and synthesis building block for the production of durable, weather-stable polyurethane systems.

## How to find the product you need

The design of the brochure and the arrangement of the products into the respective categories take into account the trend towards high solids and solvent-free polyurethane systems. The products are arranged under these headings according to their OH content or OH number, irrespective of the name. The technical product data are intended to provide clear orientation. Additional information can, of course, be obtained from the respective technical information sheets or provided on request.



## Desmophen® Baycoll®

Polyester polyols based on a variety of building blocks can be used to formulate polyurethane compounds and systems with a wide range of properties. The listed products represent a selection only:

- Desmophen® – polyester optimized for coating applications
- Baycoll® – polyester designed for adhesive applications

Many additional polyesters are furthermore available, e.g., to be used as building blocks. They can be offered on request.



### Polyester without aromatic building blocks – solvent-free, linear

	CHARACTERISTICS	OH CONTENT (SUPPLY FORM) APPROX. [%]	VISCOSITY AT 23°C APPROX. [mPa · s]	T <sub>g</sub> APPROX. [°C]	COMMENTS
<b>Baycoll® AD 5027</b>	Crystalline	0.9	2,800 at 75°C	+64	Flexible packaging, adhesion (+), PVC (+++), hydrolysis resistance (++), slip agent compatibility (--), hot melt.
<b>Desmophen® 1700</b>	Amorph	1.3	17,500	-51	Flexibilizing resin to improve toughness, durability and abrasion resistance of furniture, floor and parquet coatings.
<b>Desmophen® 1652</b>	Amorph	1.6	11,000	-58	Polyol for flexible sealants, also for plastics coatings incl. soft-touch, low saponification stability.
<b>Baycoll® AD 2055</b>	Amorph	1.7	630 at 75°C	-65	Flexible packaging, adhesion (+), hydrolysis resistance (++), slip agent compatibility (+++).
<b>Desmophen® VPLS 2328</b>	Amorph	8.0	800	-75	For highly elastic PU coatings, also in combination with hard Desmophen® products as a flexibilizing component in 2K PU systems, transparent cast systems.

## Desmophen® Baycoll®

### Polyester with aromatic and aliphatic building blocks – solvent-free, linear

	CHARACTERISTICS	OH CONTENT (SUPPLY FORM) APPROX. [%]	VISCOSITY AT 23°C APPROX. [mPa · s]	T <sub>g</sub> APPROX. [°C]	COMMENTS
<b>Baycoll® AD 2047</b>	Amorph	1.7	7,000 at 75°C	-21	Flexible packaging, adhesion (+++), hydrolysis resistance (++), slip agent compatibility (+++), viscosity (-).
<b>Baycoll® CD 2084</b>	Amorph	2.5	120 at 75°C	-56	Flexible packaging, adhesion (+), hydrolysis resistance (+), slip agent compatibility (+), viscosity (+), compatibility (+).
<b>Desmophen® 850</b>	Amorph	8.5	625 at 75°C	-15	In combination with other Desmophen® products for 2K PU coatings.

+++ = excellent    + = good  
++ = very good    - = poor



## Desmophen® Baycoll®

Branched polyester grades for an optimized polyurethane network.

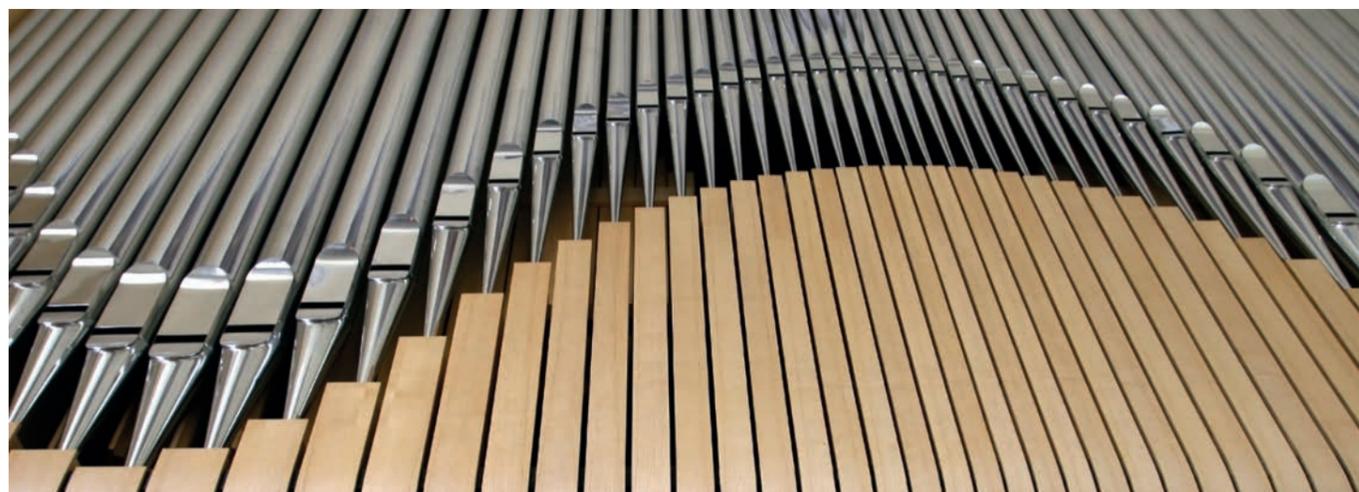
Polyester without aromatic building blocks – solvent-free, branched, liquid	GRADE	OH CONTENT (SUPPLY FORM) APPROX. [%]	VISCOSITY AT 23°C APPROX. [mPa · s]	T <sub>g</sub> APPROX. [°C]	COMMENTS
Desmophen® 1800	Slightly branched polyester polyol	1.8	21,500	-52	For highly elastic coatings for rubber and plastic articles, also for elastic high-build, textile and hose coatings.
Desmophen® 2015 W <span style="color: green; font-weight: bold;">NEW</span>	Slightly branched polyester polyol	1.8	21,500	-52	Modification of Desmophen® 1800, manufactured without tin catalysts.
Desmophen® VPLS 2249/1	Branched, short-chain polyester polyol	15.5	1,900	-47	Polyol for aliphatic, 100% solid coatings, hardening component in weather-stable polyurethane systems and transparent cast systems.
Desmophen® XP 2488	Branched polyester polyol	16.0	12,250	-57	For 100% solid coatings, e.g., in-mould coatings and very high solids 2K PU coatings.



## Desmophen® Baycoll®

Polyester with aromatic and aliphatic building blocks – solvent-free, branched, liquid

Polyester with aromatic and aliphatic building blocks – solvent-free, branched, liquid	GRADE	OH CONTENT (SUPPLY FORM) APPROX. [%]	VISCOSITY AT 23°C APPROX. [mPa · s]	T <sub>g</sub> APPROX. [°C]	COMMENTS
Baycoll® AV 2113	Highly branched polyester polyol	3.3	650 at 75°C	-59	PVC adhesion, hydrolysis resistance (++), slip agent compatibility (+).
Desmophen® 670	Slightly branched polyester polyol	4.3	2,200 (80% in BA)	-29	For flexible, weather-stable and colorfast coatings, especially for plastics, for the flexibilization of hard Desmophen® products.
Desmophen® 1200	Slightly branched polyester polyol	5.0	23,500	-42	Mixed with highly branched Desmophen® products and in combination with Desmodur® L, HL, IL or N in 2K PU coatings for wood and various plastics.
Desmophen® 1100	Branched polyester polyol	6.5	30,500	-42	Mixed with highly branched Desmophen® products and in combination with Desmodur® L, HL, IL or N in 2K PU coatings for wood and various plastics.
Desmophen® 800	Highly branched polyester polyol	8.6	850 (70% in MPA)	-32	For air-drying 2K coatings yielding hard, chemically resistant films, high impact resistance, toughness and abrasion resistance.



## Desmophen®

Branched, solvent-borne polyester grades for numerous high-performance coating applications; supplied in suitable solvent grades for various application techniques.



### Polyester with aromatic and aliphatic building blocks – solvent-borne, branched

	GRADE	SUPPLY FORM SOLID CONTENT [%]	OH CONTENT (SUPPLY FORM) APPROX. [%]	VISCOSITY AT 23°C APPROX. [mPa · s]	T <sub>g</sub> APPROX. [°C]	COMMENTS
<b>Desmophen® 690 MPA</b>	Branched polyester polyol	70 in MPA	1.4	10,000	+42	Weather-stable and colorfast specialty resin, e.g., to improve adhesion on PVC.
<b>Desmophen® T 1665 SN/IB</b>	Slightly branched polyester polyol	65 in SN/IB	1.7	2,700	+16	Combination resin for baking primers, automotive primer surfacers, can/coil coatings and industrial coatings with very good weather stability.
<b>Desmophen® 680 X</b>	Branched polyester polyol	60 in X	1.8	2,750	+20	For fast-drying, weather-stable coatings, especially for industrial and transportation applications.
<b>Desmophen® T 1775 SN</b>	Slightly branched polyester polyol	75 in SN	2.0	3,700	-14	Co-reactant for blocked polyisocyanates for can/coil and industrial coatings.
<b>Desmophen® 680 BA</b>	Branched polyester polyol	70 in BA	2.2	3,000	+20	For fast-drying, weather-stable coatings, especially for industrial and transportation applications.
<b>Desmophen® 670 BA</b>	Slightly branched polyester polyol	80 in BA	3.5	3,000	-21	For fast-drying, weather-stable coatings, especially for industrial and transportation applications.
<b>Desmophen® VP LS 2388</b>	Slightly branched polyester polyol	80 in BA	3.8	3,000	-21	For flexible 2K PU coatings with QUV stability (UV-B) and chemical resistance, especially for plastics, for flexibilizing of hard Desmophen® products.

## Desmophen®



### Polyester with aromatic and aliphatic building blocks – solvent-borne, branched

	GRADE	SUPPLY FORM SOLID CONTENT [%]	OH CONTENT (SUPPLY FORM) APPROX. [%]	VISCOSITY AT 23°C APPROX. [mPa · s]	T <sub>g</sub> APPROX. [°C]	COMMENTS
<b>Desmophen® 650 MPA</b>	Branched polyester polyol	65 in MPA	5.3	20,000	+48	For weather-stable, colorfast and chemically resistant coatings, primarily for transportation and aircraft applications and high-grade industrial finishing.
<b>Desmophen® 651 MPA</b>	Branched polyester polyol	65 in MPA	5.5	14,500	+48	Properties largely comparable with Desmophen® 650, better compatibility with other binders in aromatic solvents, for barrier coating on tropical woods.
<b>Desmophen® 651 MPA/X</b>	Branched polyester polyol	67 in MPA/X	5.5	25,000	+48	Properties largely comparable with Desmophen® 650, better compatibility with other binders in aromatic solvents, for barrier coating on tropical woods.
<b>Desmophen® 800 80% BA</b>	Highly branched polyester polyol	80 in BA	6.9	3,500	-24	Supply form Desmophen® 800.
<b>Desmophen® 800 MPA</b>	Highly branched polyester polyol	85 in MPA	7.5	11,000	-24	In combination with Desmodur N 75, N 3390 and N 3600 very good weathering properties and gloss retention, due to the high crosslinking ratio good solvent and chemical resistant.
<b>Desmophen® VPLS 2089</b>	Branched polyester polyol	75 in BA	6.0	10,000	+15	Combination with Desmodur N 3200 in two-component polyurethane coatings for higher solids (lower VOC), outstanding gloss retention, light stability and good chemical and abrasion resistance.
<b>Desmophen® 631 MPA</b>	Branched polyester polyol	75 in MPA	6.3	19,500	-23	For flexible 2K PU coatings with QUV stability (UV-B) and chemical resistance, especially for plastics, for flexibilizing of hard Desmophen® products.

## Desmophen®

Fatty acid-modified polyester grades for improved compatibility.

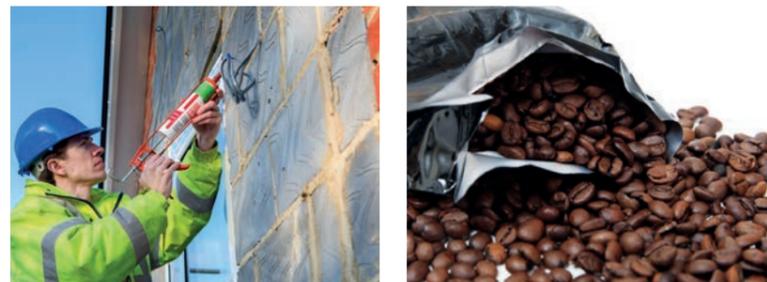


### Polyester with aromatic and aliphatic building blocks – solvent-borne, branched, fatty acid-modified

	GRADE	OH CONTENT (SUPPLY FORM) APPROX. [%]	VISCOSITY AT 23°C APPROX. [mPa · s]	T <sub>g</sub> APPROX. [°C]	COMMENTS
Desmophen® PL 800	70 in X	2.5	1,500	-16	Low molecular weight polyester, good pigment wetting, gloss.
Desmophen® PL 300 X	60 in X	2.7	5,350	-4	Reactive polyester for air-drying 2K PU coating, especially for wood in combination with Desmodur® L and IL grades.
Desmophen® 1300 EA	70 in EA	3.0	300	-13	For fast-drying 2K coatings for wood, chipboard and fiberboard, for clear and pigmented primers, primer surfacers and topcoats.
Desmophen® 1300 BA	75 in BA	3.2	1,000	-13	
Desmophen® 1300 X	75 in X	3.2	3,450	-13	
Desmophen® PL 817	75 in X/MEK	3.3	10,000	-4	Non-drying, in combination with other resins, good hardness and for dull finish top coat.
Desmophen® 1388 EA	71 in EA	4.7	950	+ 2	Improved hardness, for 2K PU coatings for wood in combination with Desmodur® IL, L or N grades.

## Desmophen® Acclaim®

Linear building blocks for NCO and silane-terminated prepolymers suitable for adhesives and sealants with advantages in hydrolysis resistance and flexibility. These high-performance, low-monomer polyether polyols are prepared using Covestro's proprietary IMPACT™ technology, using a patented organo-metallic propoxylation catalyst.



	OH NUMBER APPROX. [mg KOH/g]	MOLECULAR WEIGHT APPROX. [g/mol]	VISCOSITY AT 25°C APPROX. [mPa · s]	COMMENTS
Desmophen® 1262 BD	260	430	70	Low reactive polyether, low molecular weight product.
Desmophen® 1110 BD	112	1,000	140	Low reactive polyether.
Desmophen® 1111 BD	112	1,000	155	Low monol polyether, low reactive, odorless, good compatibility with pMDI.
Desmophen® 2060 BD	56	2,000	310	Low reactive polyether, good compatibility with pMDI.
Desmophen® 2061 BD	56	2,000	345	Low monol polyether, low reactive, odorless, good compatibility with pMDI.
Desmophen® 4028 BD	28	4,000	870	High reactive polyether, good compatibility with pMDI.
Desmophen® 5168 T	28	4,000	870	Reactive polyether, good compatibility with pMDI.
Acclaim® Polyol 4200	28	4,000	970	Low monol polyether, low reactive, odorless, good compatibility with pMDI.
Acclaim® Polyol 8200 N	14	8,000	3,000	Low monol polyether, low reactive, odorless.
Acclaim® Polyol 12200 N	10	12,000	6,000	Low monol polyether, low reactive, odorless.
Acclaim® Polyol 18200 N	6	18,000	23,000	Low monol polyether, low reactive, odorless.

\* These products represent only a selection of the entire polyether portfolio. Additional polyether products can be found, for example, on the Covestro website: [www.products.covestro.com](http://www.products.covestro.com). Product availability might change.

# Desmophen® Acclaim®

Branched building blocks for NCO and silane-terminated prepolymers suitable for adhesives and sealants with advantages in hydrolysis resistance and flexibility. These high-performance, low-monomer polyether polyols are prepared using Covestro's proprietary IMPACT™ technology, using a patented organo-metallic propoxylation catalyst.



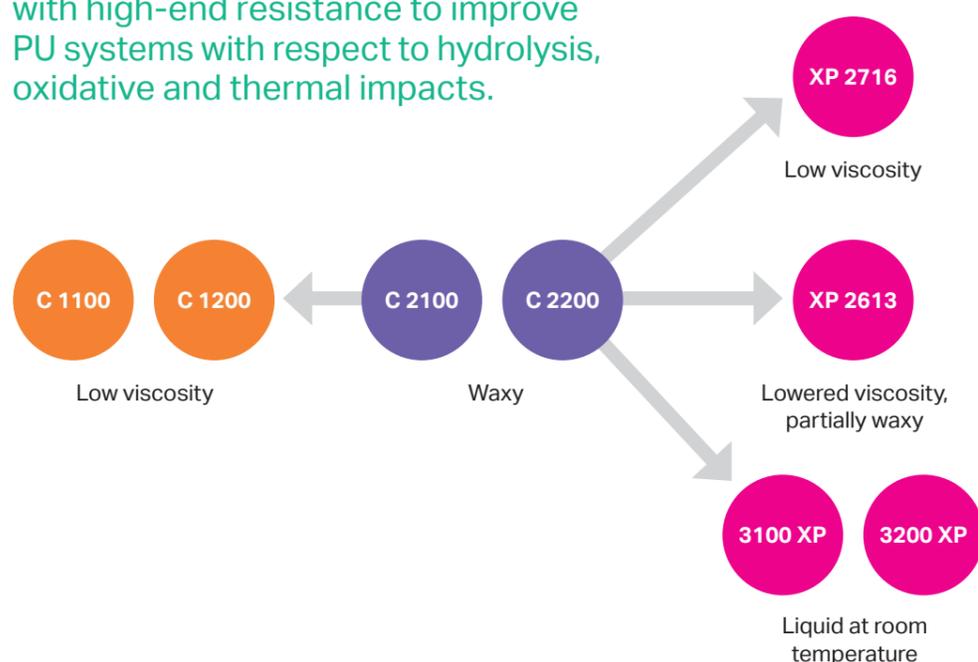
	OH NUMBER APPROX. [mg KOH/g]	MOLECULAR WEIGHT APPROX. [g/mol]	VISCOSITY AT 25°C APPROX. [mPa · s]	COMMENTS
<b>Polyether – triol*</b>				
Desmophen® 4011 T	550	300	1,800	Low reactive polyether, low molecular weight product.
Desmophen® 1400 BT	400	420	370	Low reactive polyether, low molecular weight product, good compatibility with pMDI.
Desmophen® 1380 BT	385	440	600	Low reactive polyether, low molecular weight product.
Desmophen® 1381 BT	385	440	600	Low reactive polyether, low molecular weight product, lower acidity than 1380 BT.
Desmophen® 28HS98	233	720	250	Low reactive polyether, low molecular weight product.
Desmophen® 3061 BT	56	3,000	500	Reactive polyether.
Baygal® 70RE30	56	3,000	480	Low reactive polyether.
Desmophen® 4042 BT	45	3,700	790	Low monol polyether, low reactive, odorless.
Desmophen® 5034 BT	35	4,800	860	Reactive polyether.
Desmophen® 5035 BT	35	4,800	860	Reactive polyether, only for 2-component systems.
Acclaim® Polyol 6300	28	6,000	1,500	Low monol polyether, low reactive, odorless.

	OH NUMBER APPROX. [mg KOH/g]	FILLER CONTENT APPROX. [%]	VISCOSITY AT 25°C APPROX. [mPa · s]	COMMENTS
<b>Filled polyether – triol*</b>				
Desmophen® 5029 GT	20	43 SAN	5,500	Reactive polyether.

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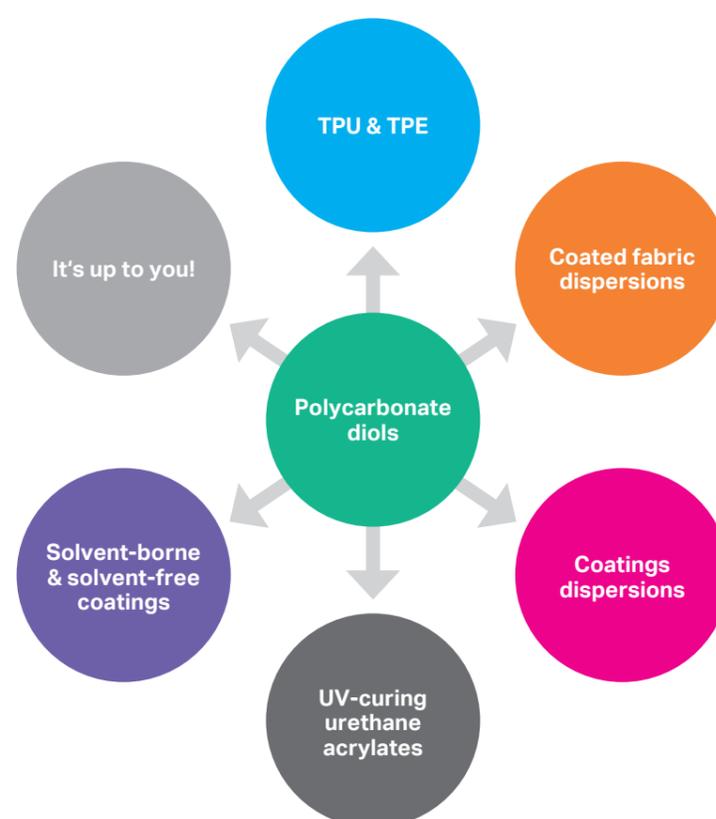
# Desmophen® C – polycarbonate diols

Desmophen® C – where softness and toughness meet flexibility combined with high-end resistance to improve PU systems with respect to hydrolysis, oxidative and thermal impacts.



- Ester-carbonate diol, more asymmetric
- Pure carbonate diol, more symmetric
- Pure carbonate diol, more asymmetric

### Application fields:



## Desmophen® C

Polycarbonate diol – where softness and toughness meet flexibility combined with high-end resistance to improve PU systems with respect to hydrolysis, oxidative and thermal impacts.



	GRADE	OH CONTENT (SUPPLY FORM) APPROX. [%]	VISCOSITY AT 23°C APPROX. [mPa · s]	SOLIDIFICATION APPROX. [°C]	EQUIVALENT WEIGHT [g/mol]	COMMENTS
<b>Desmophen® C 1100</b>	Polyester-polycarbonate diol	3.3	3,200	15	515	Low viscous grade, good compatibility, building block for polymer synthesis, flexible and weather-stable sealants and coatings, cast systems, soft-touch and self-healing.
<b>Desmophen® C 1200</b>	Polyester-polycarbonate diol	1.7	16,500	15	1,000	Low viscous grade, good compatibility, building block for polymer synthesis, flexible and weather-stable sealants and coatings, cast systems, soft-touch and self-healing.
<b>Desmophen® C 2100</b>	Polycarbonate diol	3.3	410 at 75°C	33–62	515	Building block for polymer synthesis, flexible and weather-stable sealants and coatings, cast systems, soft-touch and self-healing.
<b>Desmophen® C 2200</b>	Polycarbonate diol	1.7	2,300 at 75°C	39–52	1,000	Building block for polymer synthesis, flexible and weather-stable sealants and coatings, cast systems, soft-touch and self-healing.
<b>Desmophen® C 3100 XP</b>	Polycarbonate diol	3.3	500 at 75°C	-24	515	Better solvent compatibility, building block for polymer synthesis, flexible and weather-stable sealants and coatings, cast systems, soft-touch and self-healing.
<b>Desmophen® C 3200 XP</b>	Polycarbonate diol	1.7	2,300 at 75°C	-9	1,000	Better solvent compatibility, building block for polymer synthesis, flexible and weather-stable sealants and coatings, cast systems, soft-touch and self-healing.
<b>Desmophen® C XP 2716</b>	Polycarbonate diol	5.2	4,100	-24	326	Low molecular weight, low viscosity, building block for polymer synthesis, flexible and weather-stable sealants and coatings, cast systems, soft-touch and self-healing.
<b>Desmophen® C XP 2613</b>	Polycarbonate diol	1.7	3,500 at 75°C	-6	1,000	Partial liquid, building block for polymer synthesis, flexible and weather-stable sealants and coatings, cast systems, soft-touch and self-healing.

## Desmophen® NH

The remarkable building block tool box for highly efficient 2K polyaspartic systems – at last a versatile, lightfast polyurea system.



	SUPPLYFORM SOLID CONTENT [%]	AMINE NUMBER APPROX. [mg KOH/g]	VISCOSITY AT 25°C APPROX. [mPa · s]	EQUIVALENT WEIGHT [g/mol]	COMMENTS
<b>Desmophen® NH 1220</b>	100	244	90	234	High reactive binder or co-resin for fast setting very high solids to 100% solid 2K PU coatings (putty elastomers, spray-applied aliphatic polyurea).
<b>Desmophen® NH 1420</b>	100	201	1,450	276	Standard, moderate reactive polyaspartic resin or co-resin for very high solids to 100% solid 2K PU coatings (floor coatings, corrosion protection, topcoats), indoor-air-quality compliant.
<b>Desmophen® NH 1422</b>	100	201	1,450	276	Less reactive version of Desmophen® NH 1420.
<b>Desmophen® NH 2850 XP</b>	100	190	100	295	Reactive diluent for very high solids to 100% solid 2K PU coatings (floor coatings, corrosion protection topcoats), indoor-air quality compliant.
<b>Desmophen® NH 1520</b>	100	191	1,400	290	Low reactive polyaspartic resin or co-resin for very high solids to 100% solid 2K PU coatings (corrosion protection topcoats).
<b>Desmophen® NH 1521</b>	90 in BA	172	160	326	Supply form of Desmophen® NH 1520.

# High-performance polyaspartic

Customers key properties can be matched by formulations based on Covestro polyaspartic systems.

According to construction standard EN1504	Coating formulation	According to indoor air quality regulations, e.g., AgBB 2015
Elongation (up to 400%)	✓	VOC emission limits after 3 days
Shore hardness (up to D85)	✓	VOC emission limits after 28 days
Tire mark resistance	✓	Olfactory examination after 28 days



## Desmocoll®

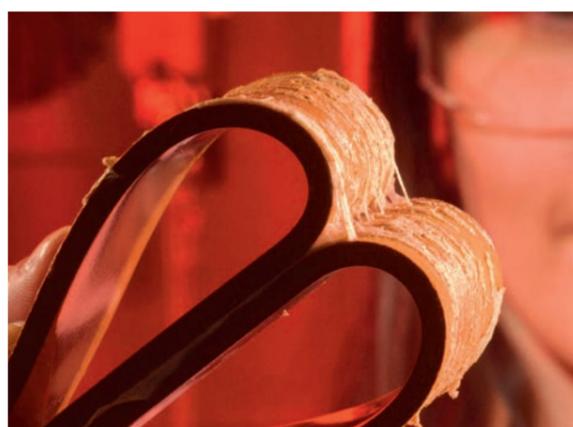
Polyester polyurethanes for solvent-borne adhesives



	SOLUTION VISCOSITY AT 23°C (15% IN MEK) APPROX. [mPa · s]	CRYSTALLIZATION TIME (DIN 53505) APPROX.	MIN. ACTIVATION TEMPERATURE [°C] (DIN EN 12961) APPROX.	THERMO-PLASTICITY	SOFTENING POINT (ASTM D 816) (1k) APPROX. [°C]	APPEARANCE	COMMENTS
<b>Desmocoll® 140</b>	90	48 h	45	high	< 40	Transparent	Foil lamination.
<b>Desmocoll® 176</b>	600	48 h	45	high	45	Turbid	Textile lamination, grinding belts.
<b>Desmocoll® 400/1</b>	600	30 min	50	high	50	Transparent	Soluble in methylene chloride, conveyor belt repair.
<b>Desmocoll® 400/2</b>	1,000	30 min	50	high	50	Transparent	
<b>Desmocoll® 400/3</b>	1,750	30 min	50	high	50	Transparent	
<b>Desmocoll® 406</b>	600	72 h	50	high	40	Turbid	Contact adhesives, lamination.
<b>Desmocoll® 500/1</b>	225	5 min	50	high	50	Transparent	Soluble in toluene and methylene chloride, conveyor belt repair.
<b>Desmocoll® 500/2</b>	600	5 min	50	high	50	Transparent	
<b>Desmocoll® 526</b>	600	48 h	50	medium	60	Turbid	Contact adhesives.
<b>Desmocoll® 530/1</b>	690	30 min	55	low	75	Transparent	Fast crystallizing, high 1k heat resistance.
<b>Desmocoll® 530/2</b>	1,200	30 min	55	low	75	Transparent	
<b>Desmocoll® 530/3</b>	1,950	30 min	55	low	75	Transparent	

## Desmocoll®

	SOLUTION VISCOSITY AT 23°C (15% IN MEK) APPROX. [mPa · s]	CRYSTALLIZATION TIME (DIN 53505) APPROX.	MIN. ACTIVATION TEMPERATURE [°C] (DIN EN 12961) APPROX.	THERMO-PLASTICITY	SOFTENING POINT (ASTM D 816) (1k) APPROX. [°C]	APPEARANCE	COMMENTS
Desmocoll® 540/1	300	10 min	60	low	80	Slightly turbid	Premium grade, highest 1k heat resistance.
Desmocoll® 540/2	750	10 min	60	low	80	Slightly turbid	
Desmocoll® 540/3	1250	10 min	60	low	80	Slightly turbid	
Desmocoll® 540/4	1800	10 min	60	low	80	Slightly turbid	
Desmocoll® 540/5	2850	10 min	60	low	80	Slightly turbid	
Desmocoll® 621/1	1800	2 h	55	low	70	Transparent	General purpose.
Desmocoll® 621/2	2600	2 h	55	low	70	Transparent	
Desmocoll® XP 2597/2	750	50 min	45	low	75	Slightly turbid	Footwear, good initial heat resistance.
Desmocoll® XP 2597/3	1250	50 min	45	low	75	Slightly turbid	
Desmocoll® XP 2597/4	1850	50 min	45	low	75	Slightly turbid	
Desmocoll® XP 2597/5	2650	50 min	45	low	75	Slightly turbid	



## Desmomelt® nonreactive resins

Linear, thermo-activatable polyurethanes for adhesives with terminal hydroxyl groups based on crystallizing polyester polyols and aromatic diisocyanates. They are available in the form of granules for extrusion or direct coating and powder for scatter coating applications.



### Linear, thermo-activatable polyurethanes

	SOLUTION VISCOSITY AT 23°C (15% IN MEK) APPROX. [mPa · s]	CRYSTALLIZATION TIME [min] (DIN DIN 53505)	MIN. ACTIVATION TEMPERATURE [°C] (DIN EN 12961) APPROX.	THERMO-PLASTICITY	SOFTENING POINT [°C] (ASTM D 816)	PARTICLE SIZE [µm]	COMMENTS
Desmomelt® VP KA 8702	200	10	60	low	80	< 600	Powder. Mainly textile and leather lamination.
Desmomelt® 530	1200	30	55	low	75		Extruded flat products made from this raw material (hot melt adhesive films and fleeces) have outstanding adhesion on a large number of materials.
Desmomelt® 540/1	300	10	60	low	80		Extruded flat products made from this raw material (hot melt adhesive films and fleeces) have outstanding adhesion on a large number of materials. It has high initial bond strength and thermal stability.
Desmomelt® 540/3	1850	10	60	low	80		Extruded flat products made from this raw material (hot melt adhesive films and fleeces) have outstanding adhesion on a large number of materials. It has high initial bond strength and thermal stability.

# Desmolac®

Nonfunctional molecular weight polyurethane resins for plastic finishes.



	SUPPLY FORM SOLID CONTENT [%]	GRADE	VISCOSITY AT 23°C APPROX. [mPa · s]	COMMENTS
<b>Desmolac® 4340 X/IB</b>	40 in X/IB	IPDI based	7,500	Alone or in combination with polyisocyanates for primers, basecoats or finishes for flexible substrates.
<b>Desmolac® 2100</b>	100	MDI based	800 (30% in MEK)	Binder for physically drying primers and finishes for plastic substrates.



## Pergut®

Coating and adhesive raw materials based on chlorinated rubber. All grades with low content of toluene ( $\leq 2.5\%$ ) and extremely low content of  $\text{CCL}_4$  ( $<0.005\%$ ).



	VISCOSITY* AT 23°C APPROX. [mPa · s]	CHLORINE CONTENT [wt. %]	RAW MATERIAL	COMMENTS
Pergut® S 5	5	$\geq 64.5$	Polybutadiene	Hot seal coatings, binder for anti-corrosion coatings, combination binder, e.g., for alkyd resins, acrylates and ketone resins.
Pergut® S 10	11	$\geq 64.5$	Polyisoprene	Binder, e.g., for anticorrosion coatings and road marking.
Pergut® B 10	10	$\geq 64.0$	Polybutadiene	Binder, e.g., for, anticorrosion coatings and road marking.
Pergut® S 20	20	$\geq 64.5$	Polyisoprene	Binder for adhesives and, e.g., anti-corrosion, concrete, roadmarking & printing inks.
Pergut® B 20	20	$\geq 64.0$	Polybutadiene	Binder, e.g., for anti-corrosion, concrete & roadmarking.
Pergut® S 40	42	$\geq 64.5$	Polyisoprene	Binder for adhesives and, e.g., anti-corrosion, concrete, swimming pools; combination binder, e.g., for alkyd resins, acrylates and ketone resins.
Pergut® S 90	92	$\geq 64.5$	Polyisoprene	Binder for adhesives and, e.g., for swimming pools and concrete coatings.
Pergut® S 130	150	$\geq 64.5$	Natural rubber	Used as primer and adhesion promoter between rubber and metal.
Pergut® S 170	165	$\geq 64.5$	Polyisoprene	Used as primer and adhesion promoter between rubber and metal.

\* Viscosity and iodine color value measured in 18.5% solution in toluene

## Legend

Solvents					
BA	Butyl acetate	MEK	Methylethylketone	pMDI	Polymeric diphenylmethane diisocyanate
EA	Ethyl acetate	SN	Solvent naphtha	$T_g$	Glass transition temperature
IB	Isobutanol	X	Xylene		
MPA	Methoxypropylacetate	SAN	Styrene acrylonitrile copolymer		

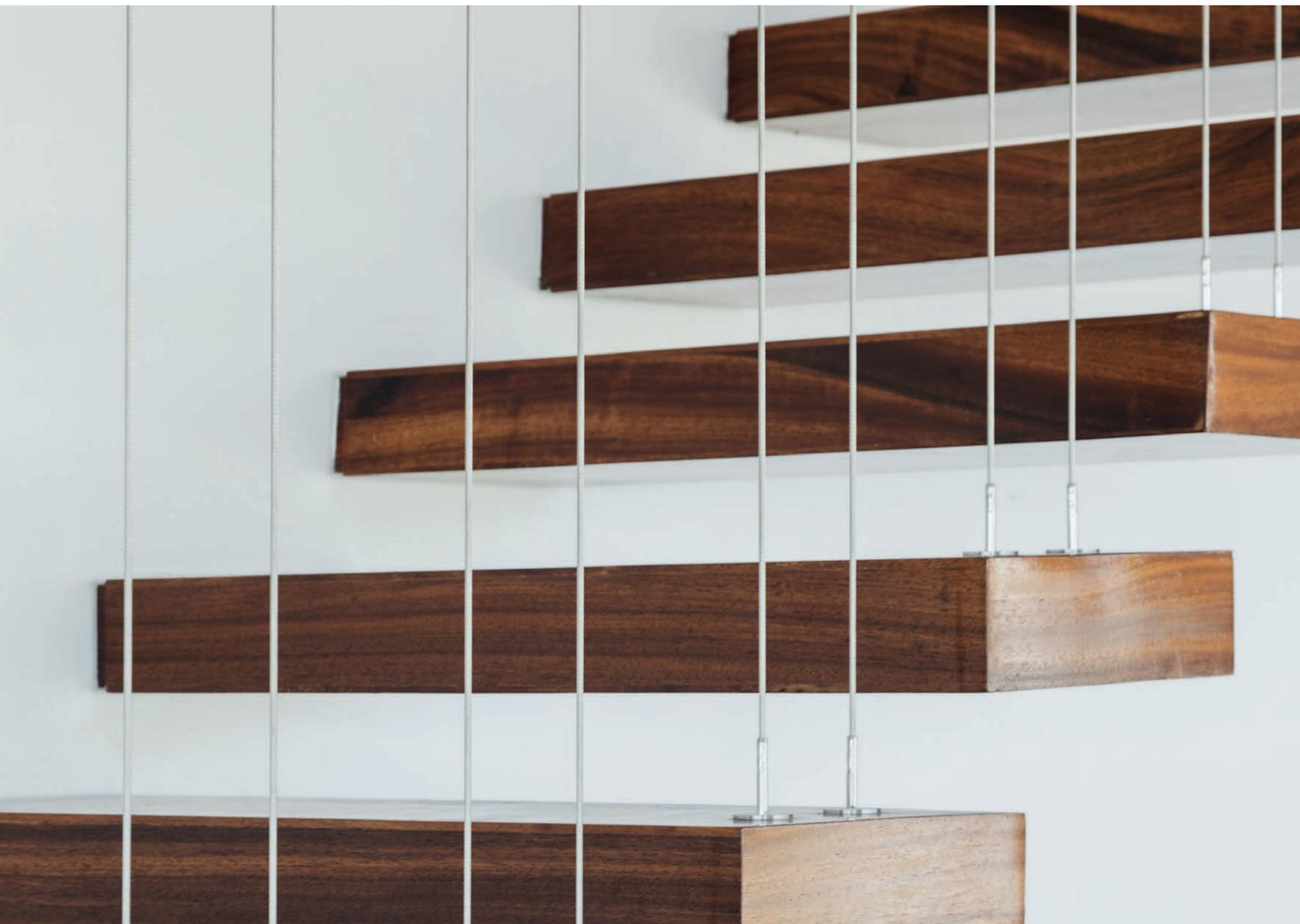


# Fast-lane access to polyurethane innovations

At Covestro, innovation is in our DNA. Ever since Otto Bayer discovered polyurethanes in 1937, we have been driving polyurethane innovations in coatings and adhesives as well as in other application areas. As our partner, you enjoy fast-lane access to polyurethane innovations, and can help us in developing the next generation of polyurethanes to meet the industry's upcoming challenges and needs. What can we offer you?

- Powerful know-how on both established and new polyisocyanates, as well as on new polyurethane hybrid technologies.
- The prospect of new application technologies to enable efficient processes.
- More sustainable, biomass- or CO<sub>2</sub>-based materials that do not sacrifice high performance.

**Join us to shape the future!**





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Edition: 2017 · Order No.: COV00082280 · Printed in Germany