We have supplied the coatings industry for many years with a wide range of high-quality intermediates for the production of modern coatings. Binders, crosslinking agents and reactive diluents as well as solvents and additives form part of our portfolio. Our integrated global production and logistics network enables us to supply our customers around the globe flexibly and reliably. The expertise of our customers at all stages of the coatings value chain.

In close cooperation with our customers, we also develop new intermediates that are specifically aligned to the needs of the coatings industry. We support the development of new businesses and contribute to the improvement of existing formulations. Intensive communication with our customers forms the basis of our work.

We continuously expand our expertise especially for the coatings industry, acquiring specific know-how in this field. In the future we intend to support and promote innovations in the various business areas of this industry even more systematically and faster than ever to help our customers to keep growing profitably.

It is listening that makes the difference! By offering a wide range of innovative approaches and methods we strive for a target-oriented dialog with our customers. In this way, too, we promote our goal of helping our customers to be more successful.

Focusing on coatings industry needs, we organize professional innovation workshops, develop new products in joint projects and offer technical support.

Contact us

Please email us at:
info.intermediates@basf.com

For further information and your regional contact, please visit our website:
www.basf.de/en/intermed/industries/coatings/

Listening makes the difference!
### Solvent-borne and high-solids coatings

Solvent-borne formulations have historically demonstrated high performance in diverse coating applications. They are comprehensively used in automotive coatings, industrial coatings, and printing inks. New high-solids formulations (50%-70% solids) successfully meet regulations with regard to volatile organic compounds (VOC) regulations, customer specifications.

Solvent-borne coatings are formulated as one- or two-component systems using a variety of commercially available binders.

We offer building block options to the manufacturers of alkyd and polyester resins. Vinyl ethers, with different alkyl groups, are specialty monomers for the production of PVC copolymers and flours resin used as versatile binders in anti-corrosion coatings. The curing characteristics of two-component epoxy and urethane-based coating formulations are promoted by BASF’s Lupragen® isocyanate-based coating formulations.

The curing characteristics of two-component epoxy and urethane-based coating formulations are promoted by BASF’s Lupragen® isocyanate-based coating formulations. Specialty solvents are available to increase the performance of the coatings.

We offer broad expertise in a wide range of high-quality intermediates for manufacturing modern coatings. With our global reliability and flexibility as well as our clear dedication to continuous improvement, we have earned the trust of customers in the coatings industry. Intensive communication with our customers forms the basis of our work.

<table>
<thead>
<tr>
<th>Products</th>
<th>Curing techniques</th>
<th>Building block/chemistry</th>
<th>Applications</th>
<th>Distinguished properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Ethylhexanoic acid</td>
<td>Urethanes</td>
<td>Self-crosslinking</td>
<td>Pigments</td>
<td>Excellent UV stability, outstanding chemical resistance, low viscosity, flexibility, toughness</td>
</tr>
<tr>
<td>Vinyl ethers</td>
<td>Radiation curing</td>
<td>但他们</td>
<td>Adhesives</td>
<td>Self-crosslinking building block for improved solubility, flexibility and optimum compatibility</td>
</tr>
<tr>
<td>Polyalcohols</td>
<td>Polyesters (including POM)</td>
<td>Adhesives</td>
<td>Adhesives</td>
<td>Self-crosslinking building block for improved adhesion and flexibility</td>
</tr>
<tr>
<td>Amines</td>
<td>Epoxies</td>
<td>Adhesives</td>
<td>Adhesives</td>
<td>Self-crosslinking building block for optimum balance of flexibility and resistance (toughness)</td>
</tr>
<tr>
<td>Acids</td>
<td>Polyesters (including POM)</td>
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<td>Adhesives</td>
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</tbody>
</table>

*Note: Data may not be exhaustive and are subject to change. Please consult the BASF Intermediates portfolio for the most current information.*
Focusing on coatings industry needs, we organize professional innovation workshops, develop new products in joint projects and offer technical support.

We have supplied the coatings industry for many years with a wide range of high-quality intermediates for the production of modern coatings. Binders, crosslinking agents and reactive diluents as well as solvents and additives form part of our portfolio. Our integrated global production and logistics network enables us to supply our customers around the globe flexibly and reliably. OurVerbund enables us to respond to the changing demands of our customers at all stages of the coatings value chain.

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Listening makes the difference!
UV coatings

UV-curable coating technology provides benefits in terms of good performance, environmental compatibility and processing efficiency. Liquid forms of UV-curing systems are solvent-free, require low energy for curing, and are adaptable to most conventional coating methods. Employing either radical or cationic curing mechanisms, the crosslinking of these coatings is initiated by means of UV light. UV-curable coating formulations are based on acrylic monomers (mainly acrylic esters of polyesters, polyethers and polyurethanes) and oligomers. In addition to O-vinyl compounds (e.g., vinyl ethers) used as reactive diluents, we also offer a range of N-vinyl compounds (e.g., N-vinyl caprolactam) for UV-curable coatings.

We offer broad expertise in a wide range of high-quality intermediates for manufacturing modern coatings. With our global reliability and flexibility as well as our clear dedication to innovation we strive to meet the needs of customers in the coatings industry. Intensive communication with our customers forms the basis of our work.

We offer multi-functional polyol intermediates for the manufacturing of UV-curable acrylic monomers and oligomers. In addition, to O-vinyl compounds (e.g., vinyl ethers), we use reactive diluents. We also offer a range of N-vinyl compounds (e.g., N-vinyl caprolactam) for UV-curable coatings.

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**New products in the BASF Intermediates portfolio**

**Products**

<table>
<thead>
<tr>
<th>Products</th>
<th>Curing technologies</th>
<th>Building blocks/chemistry</th>
<th>Applications</th>
<th>Distinguished properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-Methylmorpholine</td>
<td>Physical drying</td>
<td>Polyesters (including alkyls and UP resins)</td>
<td>Anti-corrosion</td>
<td>high flexibility, improved adhesion</td>
</tr>
<tr>
<td>Polycarboxilates and derivatives</td>
<td>Oxidative drying</td>
<td>Polyesters (including alkyls and UP resins)</td>
<td>Automotive</td>
<td>high flexibility, improved adhesion</td>
</tr>
<tr>
<td>1,4-Benzodiol</td>
<td>Urethanes</td>
<td>Polyesters (including alkyls and UP resins)</td>
<td>General industry</td>
<td>excellent UV stability, low viscosity, flexibility, toughness</td>
</tr>
<tr>
<td>N,N-Dimethylethanolamine</td>
<td>Amino resins</td>
<td>Polyesters (including alkyls and UP resins)</td>
<td>Graphic arts</td>
<td>excellent UV stability, outstanding chemical resistance, low viscosity, flexibility, toughness</td>
</tr>
<tr>
<td>Hydroxypivalic neopentylglycol ester, HPN</td>
<td>Epoxies</td>
<td>Polyesters (including alkyls and UP resins)</td>
<td>Wood</td>
<td>excellent UV stability, outstanding chemical resistance, low viscosity, flexibility, toughness</td>
</tr>
<tr>
<td>Trimethylolpropane, TMP</td>
<td>Reactive diluents</td>
<td>Polyesters (including alkyls and UP resins)</td>
<td>Can and coil</td>
<td>excellent UV stability, outstanding chemical resistance, low viscosity, flexibility, toughness</td>
</tr>
<tr>
<td>Neopentylglycol, NPG</td>
<td>Special solvents</td>
<td>Polyesters (including alkyls and UP resins)</td>
<td>Others</td>
<td>excellent UV stability, outstanding chemical resistance, low viscosity, flexibility, toughness</td>
</tr>
<tr>
<td>Neol®</td>
<td>Additives</td>
<td>Polyesters (including alkyls and UP resins)</td>
<td>Graphic arts</td>
<td>excellent UV stability, outstanding chemical resistance, low viscosity, flexibility, toughness</td>
</tr>
<tr>
<td>Neol®</td>
<td>PolyTHF®</td>
<td>Polyesters (including alkyls and UP resins)</td>
<td>Architectural</td>
<td>excellent UV stability, outstanding chemical resistance, low viscosity, flexibility, toughness</td>
</tr>
<tr>
<td>Neol®</td>
<td></td>
<td>Polyesters (including alkyls and UP resins)</td>
<td>Others</td>
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<td>Others</td>
<td>excellent UV stability, outstanding chemical resistance, low viscosity, flexibility, toughness</td>
</tr>
</tbody>
</table>

**Distinguished properties**

- High flexibility, improved adhesion
- Excellent viscosity reduction
- Adhesion promotion, anti-corrosion
- Accelerator for unsaturated polyester
- Anti-corrosion
- Automotive
- General industry
- Graphic arts
- Architectural
- Others
- Wood
- Can and coil
- UV-curable coating technology provides benefits in terms of good performance, environmental compatibility and processing efficiency. Liquid forms of UV-curing systems are solvent-free, require low energy for curing, and are adaptable to most conventional coating methods. Employing either radical or cationic curing mechanisms, the crosslinking of these coatings is initiated by means of UV light. UV-curable coating formulations are based on acrylic monomers (mainly acrylic esters of polyesters, polyethers and polyurethanes) and oligomers. In addition to O-vinyl compounds (e.g., vinyl ethers) used as reactive diluents, we also offer a range of N-vinyl compounds (e.g., N-vinyl caprolactam) for UV-curable coatings.
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In close cooperation with our customers, we also develop new intermediates that are specifically adapted to the needs of the coatings industry. We support the development of new businesses and contribute to the improvement of existing formulations. Intensive communication with our customers forms the basis of our work.

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For further information and your regional contact, please visit our website: www.basf.de/en/intermed/industries/coatings/
Water-borne coatings

Water-borne coatings use water as a solvent, which makes them eco-friendly and easy to apply. They are currently available for many different applications, including wood coatings, furniture coatings, plastic coatings and printing inks.

Binders for water-borne coatings are typically polyacrylate, polyether or polyurethane polymers. Additionally, epoxy and alkyd resins can be formulated for water-borne coating applications.

We offer a broad range of building blocks for alkyl, polyester and polyurethane-based water-borne binders. Our water-soluble amines are used in two-component polyester and polyurethane-based water-borne binders. Our water-soluble amines are used in two-component polyester and polyurethane-based water-borne binders. We offer a broad range of building blocks for alkyl, polyester and polyurethane-based water-borne binders.

Our expertise in a wide range of high-quality intermediates for manufacturing modern coatings. With our global reliability and flexibility as well as our proven customer service, we meet the specific needs of customers in the coatings industry. Intensive communication with our customers forms the basis of our work.

Applications

- Distinguished properties
- Excellent UV stability, outstanding chemical resistance, low viscosity, flexibility, toughness
- Incorporation of amine groups
- Building block for concrete additives
- Adhesion promoter anti-corrosion
- Curing technologies
- Radiation curing
- Physical drying
- Oxidative drying
- Urethanes
- Amino resins
- Epoxies
- Radiation curing
- Alkyds and UP resins
- Polyurethanes
- Acrylic and vinyl polymers
- Epoxies
- Polyoxymethylene (POM)
- Reactive diluents
- Special solvents
- Additives
- Anti-corrosion
- Automotive
- General industry
- Wood
- Can and coil
- Graphic arts
- Architectural
- Others

Coating technologies
We have supplied the coatings industry for many years with a wide range of high-quality intermediates for the production of modern coatings. Binders, crosslinking agents and reactive diluents as well as solvents and additives form part of our portfolio. Our integrated global production and logistics network enables us to supply our customers around the globe flexibly and reliably. We foster and support the growth of our customers at all stages of the coatings value chain.

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Powder coating is a major metal coating technology for household appliances, furniture, fences, pipes, and structural applications. Additionally, low temperature (< 100°C) UV-cured powder coatings have been developed for wood applications in recent years. Many binder technologies are available in today's market. Crosslinkable powder coatings often use saturated polyester resins as binders.

Our product portfolio includes building blocks, catalytic additives, and crosslinkers for polyester resins.

We offer broad expertise in a wide range of high-quality intermediates for manufacturing modern coatings. With our global reliability and flexibility as well as our clear dedication to innovation we strive to meet the needs of customers in the coatings industry. Intensive communication with our customers forms the basis of our work.

**Products**

**Acids**
- 2,6-Naphthalenedicarboxylic Acid (HNDA)*

**Polyols and derivatives**
- HDO® 1,6-Hexanediol
- Neop® Neopentylglycol, NPG
- Hydroxypropyl neopentylglycol ether, HPN
- TMP® (hydro), trimethylolpropane
- Capromer™ PT1-05 (polycaprolactone)

**2-Methylimidazole pure**

*New products in the BASF Intermediates portfolio
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Low-viscosity epoxy binders (lower molecular weight) are formulated into solvent-free, two-component epoxy coatings for application on metal, pipes, and floors.

Our poly-functional polyetheramines react with commercially available diisocyanate-terminated monomers or polymers to form polyurea coatings for construction, roof and tank coating applications.

Unsaturated polyester resins are used in high-gloss wood coatings and composite applications.

As an alternative to styrene used in unsaturated polyester resins our vinyl ethers can be used as reactive diluents for proper viscosity adjustment. We offer a diverse portfolio of building blocks, reactive diluents (vinyl ethers), crosslinkers, special solvents, and additives for solvent-free liquid unsaturated polyester coating applications.