

FORMULATE THE FUTURE

PRODUCT REFERENCE GUIDE



Your formulation is our focus.

With our innovative solutions for coatings, paints, printing inks and adhesives not only do we help our customers to overcome challenges, but we also give them significant advantages to successfully grow their business.

We go beyond our own products by putting your formulation at the center of all our activities. Our experts are always curious to come up with new ideas to improve existing formulations, develop new ones and ultimately optimize the coating itself.

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Coating Additives

The Coating Additives business line supplies its customers with optimal solutions in the paints, coatings and printing ink sectors and supports them with the production of resource-efficient coatings. The business line bundles a diverse product portfolio for the coatings industry, like additives, co-binders, matting agents, fumed silica, specialty resins and nanoresins.

Product name	Additives
ACEMATT®	Precipitated and thermal silica matting agents for gloss reduction and haptic properties
AERODISP®	Dispersions based on AEROSIL® fumed silica for rheology control and pigment stabilization for waterborne coatings
AEROSIL®	Fumed silica for rheology control, pigment stabilization, free flow, reinforcement and improved corrosion resistance for solvent, waterborne, UV, and powder coatings
AEROXIDE®	Fumed aluminium oxide for powder coatings to improve free flow properties
AIRASE®	Defoamers and deaerators for waterborne applications, each formulated to provide optimum defoaming and compatibility
CARBOWET®	Effective wetting and surface tension reduction additives with varying degrees of emulsification and stabilization
DYNOL™	Superwetting surfactants for the most difficult to wet surfaces
SIPERNAT®	Synthetic amorphous silicates for replacement of TiO ₂ and specialty silica for improvement of film properties
SPHERILEX®	Spherical amorphous precipitated silica for improving the mechanical resistance of coatings
SURFYNOL®	Range of multi-functional surfactants and defoamers including low foam dynamic wetting agents, unique molecular defoamers, and specialty surfactants
TEGO® Airex	Prevents air inclusions and pinholes in waterborne, solventborne, and radiation-curing coatings
TEGO® ColorAid	Compatibilizers to optimize incorporation of pigment concentrates in base paints

Coating Additives – continued

Product name Additives – continued

TEGO® Dispers	Promotes pigment wetting and stabilization and prevents floating, flooding and settling of pigments
TEGO® Foamex	Prevents foam formation in waterborne coatings and printing inks
TEGO® Flow TEGO® Glide	Improves flow/leveling, slip and scratch resistance. Prevents cratering, pigment flooding and floatation
TEGO® Humectant	Humectant for colorants, minimized influence on coatings properties
TEGO® Phobe	Used to make hydrophobic waterborne exterior paints. Special products for other systems are available
TEGO® Protect	Anti-graffiti and easy-to-clean additives for polyurethane coatings
TEGO® Rad	Crosslinkable, acrylate additives which improve slip, substrate wetting, scratch resistance and leveling in energy-curable formulations
TEGO® Twin TEGO® Wet	Substrate wetting and anti-cratering additives
TEGO® ViscoPlus	Polyurethane thickeners for waterborne coatings providing different rheology profiles
ZETASPERSE®	Dispersants providing effective stabilization of pigments and particles in aqueous systems

Product name Specialty binders

SILIKOFTAL®	Silicone-polyester resins which provide heat and weathering resistance, low surface tension, low thermoplasticity, high flexibility, and good pigmentability
SILIKOPHEN®	Methyl and phenyl-methyl silicone resins which provide corrosion protection and heat stability up to 650 °C
SILIKOPON®	Silicone-epoxy hybrid resins that are the basis for isocyanate-free, air-drying, 2K anti-corrosion top coats

Product name Specialty binders – continued

SILIKOPUR®	Waterborne, silicone-modified 1K polyurethane dispersion. Flexible coating resin for leather, wood, plastic, rubber, and metal
SILIKOTOP®	Low-viscosity, isocyanate-crosslinking silicone polyester resins used for corrosion protection in top coat applications
TEGOMER®	Building blocks

Product name Nanoresins

ALBIDUR®	Silicone elastomer particles to modify coatings to improve fracture toughness and release properties without affecting the glass transition temperature of the cured formula
NANOCRYL® NANOPOL®	Liquid silica nanocomposites for surface hardness and scratch/abrasion resistance of coatings without impairing transparency or gloss

Product name Co-binders

TEGO® AddBond	Polyester co-binders which improve the adhesion on various substrates and corrosion resistance
TEGO® VariPlus	Widely compatible co-binders that increase solids content and accelerate touch drying while improving hardness, gloss, and film build

Contact

Coating Additives

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Please scan this QR Code to find a suitable contact partner at Evonik or visit www.coating-additives.com



Crosslinkers

Crosslinkers offers a wide variety of isocyanates and diamines to the coatings market to make highly functional, chemically resistant, non-yellowing urethane resins and epoxy hardeners. We also offer new, non-isocyanate based technologies as well as new innovations for the powder coatings industry.

Product name	Applications
VESTANAT® IPDI VESTANAT® H₁₂MDI VESTANAT® TMDI	Aliphatic diisocyanates for PUDs, UV oligomers, prepolymers, and elastomers
VESTANAT® T 1890	2K PUR coatings for automotive OEM; refinish, aircraft, plastic coatings etc.
VESTANAT® B series	Blocked polyisocyanates for thermosetting 1K PUR; excellent light stability and weather resistance
VESTANAT® B 1186A	Blocked polyisocyanate for thermosetting 1K PUR BPA free interior can coatings; FCN status for interior can coatings
VESTANAT® EP-DS series	Cosolvent-free aqueous dispersions of a blocked crosslinker for light-stable PUR systems
VESTANAT® EP-M series VESTANAT® EP-MF series VESTANAT® EP-E series	Non-isocyanate, high scratch and chemical resistant 1K and 2K coatings systems, suitable for various substrates
VESTAGON® B series VESTAGON® BF series	PUR powder coating crosslinkers for exterior weatherable, anti-graffiti, lawn & garden, heat transfer, etc.
Oxyester T series	Flexible polyesters for 1K and 2K PUR systems; helps reduce viscosity and VOCs in refinish systems
VESTAMIN® A139	Blocked diamine; accelerator for moisture cure PUR systems
VESTAMIN® IPD VESTAMIN® TMD VESTAMIN® PACM	Amines to formulate epoxy hardeners for ambient and heat cure; chain extender for PUR systems
VESTASOL®	Solvents for can and coil coatings, as well as ink applications

The new eCO Series for reduced CO₂ emissions

VESTASOL® IP eCO

100% renewable carbon, mass balance

- improves levelling and gloss
- excellent solvent power
- interlayer adhesion
- high boiling

VESTASOL® IP eCO

90% renewable carbon, mass balance

- improves levelling and gloss
- excellent solvent power
- interlayer adhesion
- high boiling

VESTANAT® IPDI eCO

75% renewable carbon, mass balance

- chemical resistance
- weatherability
- compatibility
- light stability



Contact

Crosslinkers

www.evonik.com/crosslinkers

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Crosslinkers – continued

As the world leader in high-quality, performance-oriented epoxy curing agents and modifiers, Evonik brings formulating solutions and products with unique performance advantages to epoxy systems. Formulators look to our expansive line of products across a breadth of chemistries, along with our technical support to achieve success with their most challenging projects.

Ancamide® Curing Agents

Amidoamine

Low viscosity; very good adhesion, particularly to concrete; good cure in humid conditions; modified amidoamines offer faster cure speed and improved chemical resistance

- civil engineering (flooring, concrete bonding and crack injection, tile grouts)
- high-solids coatings

Polyamide

Excellent corrosion resistance; good flexibility and toughness with high viscosity; long pot life and good water resistance

- solventborne, two-pack (2K) primers and finishes (marine coatings, pipe and tank coatings)

Ancamine® Curing Agents

Aliphatic

High reactivity; fast cure at ambient or low temperatures; relatively moisture insensitive; good chemical/solvent resistance

- civil engineering (patch repair systems and flooring)
- high-solids coatings

Cycloaliphatic

Very good chemical resistance; cure at low temperatures under damp conditions; resistant to amine blush and water spotting; excellent color/color stability

- solvent free and high-solids coatings
- flooring
- chemically-resistant linings and secondary containment

Ancarez® Waterborne Epoxy Resins

Specialty resins designed to deliver corrosion resistance when used with Evonik's waterborne curing agents (below)

- industrial coatings
- flooring

Ancquamine®, Epilink® Low/No VOC Curing Agents

Waterborne curing agents that provide low VOC and low color, and are easy to apply and clean. Products with different cure speeds for use with various types of epoxy resins

- protective and industrial concrete coatings
- steel coatings
- anti-corrosive primers

Epodil® Reactive Diluents

Viscosity reduction for ease of application; improved pigment/filler wetting. Mono-, di-, and multifunctional diluents.

- metal coatings
- concrete coatings

Amicure® Polycarbamide Curing Agents

Designed for use with polyisocyanate resins; deliver coatings with rapid hardness development, excellent low temperature cure, good color and UV stability and excellent surface appearance

- concrete coatings
- direct-to-metal (DTM) coatings

Hybridur® Waterborne Polymer Dispersions

For one part (1K) systems; rapid dry; low VOC; barrier properties; durability and UV resistance

- wood coatings (e.g. gymnasium floors)
- metal coatings
- concrete coatings
- hard plastic coatings (e.g. automotive interiors)



Contact

Epoxy Curing Agents, Customer Service
www.evonik.com/crosslinkers-contacts

Please scan this QR Code to find further information or visit
www.evonik.com/crosslinkers



Coating & Adhesive Resins

The Coating & Adhesive Resins business line manufactures high-quality binders based on polyesters and polymethacrylates for a broad spectrum of markets and applications. It includes solutions for coil coating and food packaging applications.

DYNAPOL®

Polyester resins designed for can coating, coil coating & flexible packaging applications

- Alternative to BPA based coatings
- High molecular weight
- High chemical resistance

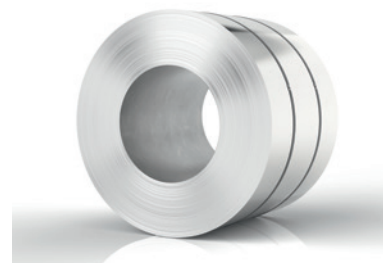
DEGACRYL® HS

Polymers for heat seal coating formulations

- Universal and secure sealing
- Transparency with anti-fog
- Recyclable PET packaging

In addition, the Coating & Adhesive Resins business line supplies solutions for a multitude of other industries. From polymers for hot melts, to reactive sealants and synthetic waxes, they provide specially designed products for a wide variety of adhesive & sealant applications.

Product name	Applications
POLYVEST® (Polybutadiene)	Car doors, engine hoods, sound dampening, printing plates, defoamers, foams, printing inks, insulated glass sealants
VESTOPLAST® (APAO)	Raw material for hot melt adhesives for e.g. hygiene, automotive and woodworking applications
VESTOWAX® (FT Wax)	PVC lubricants, printing inks and coatings or as additive for hot melt formulations
DYNACOLL® (Polyester)	Bonding/lamination of car interiors; lamination for panel bonding and sandwich construction



Contact Coating & Adhesive Resins

Please scan this QR Code to find further information or visit www.evonik.com/designed-polymers



Specialty Methacrylates

VISIOMER® methacrylates provide a broad portfolio of Specialty Methacrylate monomers with different functionalities. In close collaboration with our customers, we develop solutions for their current and future challenges.

Our VISIOMER® product range offers alkyl and aryl methacrylates, ether and acetal methacrylates, amino methacrylates, di- and trifunctional crosslinkers and monomers for adhesion promotion.



VISIOMER® Terra offers sustainable building blocks with reduced carbon footprints. VISIOMER® Terra methacrylates are friendly labeled and have a biocarbon content of up to 90%.

Life-cycle analysis data are available for all our VISIOMER® Terra products, demonstrating the carbon footprint reduction throughout the entire value chain.

The VISIOMER® Terra product range is continuously extended to meet our sustainability ambitions.

Product name	Applications
VISIOMER® Terra IBOMA	Has a bio content of 71%, provides scratch- and weather resistance to coatings and allows for low volatiles in solvent borne coatings.
VISIOMER® Terra C17.4-MA	Has a very high bio content of 81% and provides resins with maximum hydrophobicity and resistance against water and polar media.
VISIOMER® Terra C13-MA	Has a bio content of 76%, makes resins more hydrophobic, thereby improving resistance against water and solvents.



VISIOMER® methacrylates take usability and performance of emulsion paints to a higher level. Various functionalities provide individual effects for our customers' products.

Product name	Applications
VISIOMER® HEMA-P	Provides superior adhesion of both solvent- and water-borne paints to metal substrates and enhances corrosion resistance. Additionally, it acts as a polymerizable, non-migrating flame-retardant for transparent coating applications.
VISIOMER® MPEG-MA_s	Provide water borne paints with excellent low temperature stability against agglomeration and ensure stable pigment dispersion.
VISIOMER® MEEU	Improves wet adhesion and wet scrub resistance of water borne paints on wood substrates in humid climate. On metal surfaces, it enhances adhesion to the substrate and corrosion resistance.
VISIOMER® C18 PEG 1105 MA W	Helps to control the viscosity of water borne paints via associative thickening and thus improves sag control and anti-settling properties.

Contact Specialty Methacrylates

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Please scan this QR Code to find a suitable contact partner at Evonik or visit www.visiomer.com



Performance Intermediates

Performance Intermediates offers a broad range of high-quality ingredients and additives which are also used for the paints and coatings industry.

Product name	Applications
1,3-Butadiene	1,3-Butadiene is used for the production of copolymers and styrene butadiene latex (SBL) for the paint industry as well as for the production of high solid styrene butadiene rubber (HSSBR), liquid polybutadiene (LPBD) and nitrile butadiene rubber (NBR) for the coatings industry
2-Propylheptanol	2-Propylheptanol (2-PH) is used in the production of 2-Propylheptacrylate, which may be used for the manufacture of coatings
DRIVOSOL®	The DRIVOSOL® product family is used as a propellant in paint aerosols with various mixing ratios of the components n-Butane, Iso-Butane and Propane. The mixing ratio can individually be adapted to your requirements by flexible pressure settings in a range from 1.2 to 7.8 bar. Create your individual mix with our DRIVOSOL® Tuner: drivosol-tuner.evonik.com
ELATUR® CH	Diisononyl-cyclohexanoate (DINCH) is a plasticizer used for the manufacture of coatings, inks and colors
ELATUR® DPT	ELATUR® DPT (di(iso)-pentyl- terephthalate) is a new fast fuser for special PVC applications, like coatings flooring, wall coverings and films. It is especially effective when used in combination with ELATUR® CH
Isotridecyl alcohol	Isotridecyl alcohol (ITDA) can be used as and for the production of specialty solvents as well as specialty resins for coatings & inks
Tertiary-Butanol	Tertiary-Butanol (TBA) is offered in different qualities (pure and azeotrope) and is used in the production of hydroxyethyl cellulose, which is a thickener for dispersions, film-building agent for distempers and the main component of wallpaper paste
VESTINOL® 9	Diisononyl-phthalate (DINP), an INA-based plasticizer, used for the manufacture of coatings, inks and colors



Contact

Performance Intermediates
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Functional Silanes

Dynasylan® functional silanes are used as additives in coating formulations to boost adhesion, improve weathering and durability, and also change the surface properties of the coating. Our proprietary technologies include low VOC multi-functional oligomeric silanes, water-borne HYDROSIL series, ethyl polysilicate SILBOND® binders, stain repellent F-series and heavy metal-free corrosion protection SIVO® solgel binders. Dynasylan® is the solution for your next cutting-edge idea. Protectosil® products provide long-term protection for mineral-based substrates and are well-known as hydro- and oleophobic agents, preventing corrosion, graffiti and other surface damaging effects.

Product name	Applications
Dynasylan®	Adhesion promotion, crosslinking, surface modification
Dynasylan® GLYEO	Adhesion promotion for water-based coating systems
Dynasylan® HYDROSIL	Waterborne, adhesion promotion
Dynasylan® SIVO®	Cr-VI-free corrosion protection
Dynasylan® SILBOND®	Binder for inorganic zinc rich coatings, inorganic zinc rich paints
Protectosil®	Water repellents , graffiti control, corrosion control (admixed and surface applied) and surface protection (easy-to-clean)



Contact

Functional Silanes

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High Performance Polymers

VESTOSINT® and VESTAMELT® bring structure to coatings. Our polyamide 12 powders transform drab surfaces into decorative or functional structured elements. Surfaces treated with coatings which are formulated with VESTAMELT® or VESTOSINT® additives have high flexural strength and elasticity and excellent abrasion resistance. Our VESTAKEEP® brand of PEEK (Polyether ether ketone) powders deliver high performance coatings, offering high temperature performance, strength, durability, and excellent wear resistance.

Product name	Applications
VESTOSINT®	Coating of metal, coil coating, textured paints, wood paints, packaging foils, rubber surfaces
VESTAMELT®	Coil coating, textured paints
VESTAKEEP®	Coating of metal (electrostatic spraying, flame spraying), dispersion coating, tribological coating



Contact

High Performance Polymers

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www.vestosint.com

www.vestakeep.com

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