

Tego – Power for Plastic Coatings



togo



Masthead

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About us

Tego – one of Evonik Industries' leading brands.

As the leading supplier of specialty chemicals worldwide, Evonik offers its customers in the coatings and printing inks industry a unique range of products under the Tego brand name. Our portfolio is the result of experience gained over more than 25 years in which we have researched and developed optimal solutions which are ideal for our customers. With over 200 products, the range currently includes not only defoamers and deaerators but also wetting and dispersing additives, leveling additives, energy-curable additives, substrate wetting additives, hydrophobing agents and even co-binders and specialty binders.

We remove air from paints, make surfaces glossy and ensure lacquers are scratch-resistant. Environmental concerns are always of key importance when developing new products.

Besides our extensive expertise in providing tailor-made solutions, our numerous contacts in more than 40 countries are an additional advantage. This underlines our philosophy of developing intelligent products for new applications not only for, but together with customers. We look forward to your challenge and are confident that we can find an advantageous solution for you.

Tego – Adding Advantages.

Tego Additives and Co-Binders





Tego Coating Additives for Plastic Coatings

A product's first contact with the market is critical for its success.

Similarly, the entire structure of a coating depends on its first contact with the substrate. Adequate wetting of substrates with low surface energies is often a challenge. This is where the use of substrate wetting additives is essential.

Waterborne formulations, in particular, require a surface tension reduction in the liquid phase; **TEGO® Wet** and **TEGO® Twin** provide the solution.

Outstanding spreading and wetting on plastics from the first to the last drop make the prospect of a brilliant surface a reality. An additional advantage: optimum surface wetting is the foundation for good substrate adhesion and excellent flow characteristics.

Increasing demands from coatings manufacture through to end use require system specific additives. The growing number of specialized binder types with increasing diversity set the tone. The right visual impression can only be obtained if conditions are optimal during the manufacture and application of coatings.

This requires effective and compatible deaeration, defoaming and optimum color strength development through rapid, thorough pigment dispersion followed by stabilization. For a brilliant overall performance, we offer **TEGO® Airex** for deaeration, **TEGO® Foamex** for defoaming and **TEGO® Dispers** for pigment dispersion and stabilization.

The consumer's first tangible contact with the product is via the cured surface. Excellent flow and leveling and the correct slip generate a positive impression of quality which defines the future perception of the object's performance. Adequate protection against, for example, mechanical stress results in durable products which satisfy a sophisticated product profile. This is a task for **TEGO® Glide** and **TEGO® Flow**. **TEGO® Rad**, our cross-linkable, acrylate-functional additive series for energy-curable formulations, can also provide solutions.

Deaerators and Defoamers

Product	System	Defoaming + deaeration			Suitable for
		Grind	Grind and let-down	Let-down	
TEGO® Airex 901 W	W	•			acrylic, PU/acrylic, styrene/acrylic
TEGO® Airex 902 W	W			•	PU/acrylic, acrylic, 2-pack PU
TEGO® Airex 920 ¹	UV		•		UV acrylate, polyester
TEGO® Airex 931	S		•		1-pack and 2-pack top coat
TEGO® Airex 936 ¹	S		•		1- and 2-pack primer and base coat
TEGO® Airex 962	S/UV		•		1-pack and 2-pack top coat
TEGO® Airex 986	S/UV		•		2-pack PU, UV acrylate
TEGO® Foamex 800	W			•	PU, PU/acrylic, acrylic
TEGO® Foamex 805	W			•	PU, acrylic, polyester
TEGO® Foamex 810	W	•			acrylic, styrene acrylic, PU/acrylic
TEGO® Foamex 815 N	W			•	acrylic, styrene acrylic
TEGO® Foamex 822	W			•	PU/acrylic, acrylic, others
TEGO® Foamex 825	W			•	acrylic, styrene acrylic, PU/acrylic

Wetting and Dispersing Additives

Product	System	Color strength and color stability				Additional information
		Aluminum pigment wetting	Carbon black	Inorganic	Organic	
TEGO® Dispers 650	W/S		•		•	
TEGO® Dispers 652	W/S/UV			•		matting agents
TEGO® Dispers 653	W		•	•	•	
TEGO® Dispers 656	W/S/UV	•		•		prevention of outgassing
TEGO® Dispers 670	S		•	•	•	
TEGO® Dispers 700	S			•		bentonite pastes
TEGO® Dispers 710	S/UV		•	•	•	
TEGO® Dispers 750 W	W		•	•	•	
TEGO® Dispers 752 W	W			•		matting agents
TEGO® Dispers 755 W	W		•	•	•	
TEGO® Dispers 760 W	W		•	•	•	
TEGO® Wet 500	W	•				

Surface Control Additives

Product	System	Slip	Flow, leveling	Block and scratch resistance	Recoat-ability	Crater prevention	Wetting & spreading on substrate	Additional information
TEGO® Flow 300 ¹	S		•		•			utmost compatibility
TEGO® Flow 425	W/S/UV		•		•		•	utmost compatibility
TEGO® Glide 100	W/S/UV	○	•		•	○	•	utmost compatibility
TEGO® Glide 410	W/S/UV	•		•		○		strong anti-crater effect
TEGO® Glide 432	UV	•	•			○	○	low foaming
TEGO® Glide 435	UV	•	•				○	low foaming
TEGO® Glide 440	W/UV	•	•			○	•	utmost compatibility
TEGO® Glide 450	W/S/UV	•	•		•	○	○	utmost compatibility
TEGO® Glide 482	W	•		•				utmost effectiveness
TEGO® Glide B 1484	S	○	•		•			deaeration

Energy-Curable Additives

Product	System	Slip	Flow, leveling	Block and scratch resistance/Release	Recoat-ability	Crater prevention	Wetting & spreading on substrate	Additional information
TEGO® Rad 2100	UV		•		•	○	○	utmost compatibility, low foaming
TEGO® Rad 2200 N	W/UV	•	•	○			○	utmost compatibility
TEGO® Rad 2300	UV	•	•	•		○	○	low foaming, good compatibility
TEGO® Rad 2500	UV	•		•				deaeration, release effect

Substrate Wetting and Anti-Cratering Additives

Product	System	Flow, leveling	Recoat-ability	Crater prevention	Wetting & spreading on substrate	Additional information
TEGO® Twin 4100	W/S/UV	•	•	•	•	low foaming, high compatibility
TEGO® Wet 240	W		•	○	•	finest atomization in spray coatings with/without co-solvents
TEGO® Wet 251	W	○	•	•	•	good flow
TEGO® Wet 265	W	○	•	•	•	low foaming
TEGO® Wet 270	W/S/UV	○	•	•	•	outstanding anti-crater effect
TEGO® Wet 500 ¹	W/UV	○	•		•	foam inhibition, highly dynamic
TEGO® Wet 510 ¹	W	○	•		•	low foaming, highly dynamic
TEGO® Wet KL 245	W/S		•	•	•	strong anti-crater effect

• core properties ○ additional effect

¹silicone-free

W = waterborne formulations S = solventborne formulations UV = energy-curable formulations



A Highlight of Tego Additives for Plastic Coatings

TEGO® Airex 902 W

Highly effective and compatible deaerator emulsion for combating micro- and macro-foam in low to medium viscosity formulations. Very good long-term stability.

TEGO® Dispers 656*

Wetting and dispersing additive for waterborne, solventborne and energy-curable formulations. Especially recommended for inorganic pigments, transparent pigments and effect pigments (prevents the chemical reaction of water with the aluminum pigments).

TEGO® Dispers 670*

High performance wetting and dispersing additive for solventborne coatings. Lowest mill-base viscosity makes highest pigment loadings possible. TEGO® Dispers 670 is suitable for a broad variety of organic, inorganic and carbon black pigments and is ideal for outstanding color strength development and transparency.

TEGO® Dispers 755 W*

Polymeric dispersant for high-quality waterborne coatings. Outstanding wetting and stabilization of inorganic and organic pigments as well as fillers and carbon blacks. It also provides high color-strength and stability.

*All our wetting and dispersing additives are free of APE.



TEGO® Flow 425

Highly effective and compatible flow control additive used in waterborne, solventborne and energy-curable formulations. Recoatable, thus recommended not only for top coats but also for primers.

TEGO® Foamex 810

Defoamer concentrate with excellent compatibility and high effectiveness even against micro-foam. Ideally suitable for addition to the grind of the waterborne coating under high shear conditions.

TEGO® Foamex 822

Highly compatible defoamer emulsion. Unique in that it is effective while also very compatible with long-lasting effect. Ideal for use in the let-down and in waterborne clear coatings.

TEGO® Glide 410

Extremely effective slip additive used in waterborne, solventborne and energy-curable formulations. Good surface slip, scratch and mar resistance and anti-blocking properties at low concentrations. In matte coatings, it also ensures optimum orientation of the matting agents.

TEGO® Glide 450

Universal flow and slip additive free of organic solvents. Despite maximum effectiveness, it has very good recoatability and thus suitable for primers and top coats.

TEGO® Rad 2200 N

Cross-linkable, highly compatible multi-purpose additive for improving surface slip and scratch resistance of UV coatings. It also improves substrate wetting and leveling.

TEGO® Rad 2500

Energy-curable deaerator and slip additive. Besides deaerating, also surface slip, scratch resistance and anti-blocking properties are improved.

TEGO® Twin 4100

Multifunctional additive with wide compatibility. Combines excellent substrate wetting and anti-crater properties without stabilizing foam.

TEGO® Wet 270

Highly effective substrate wetting additive with outstanding anti-crater effect. Excellent reduction of static surface tension, promotes flow. Used in waterborne, solventborne and energy-curable formulations.

TEGO® Wet 240

Powerful substrate wetting additive with outstanding wetting properties. Particularly suitable for spray application. Ensures very fine atomization and a closed coating film is formed at minimum film thickness.

A Highlight of Tego Co-Binders for Plastic Coatings

TEGO® VariPlus

TEGO® VariPlus products are widely used as co-binders in coatings for plastics. They improve numerous properties such as hardness, gloss and film build. Adhesion on various plastic substrates is increased, which together with its resistance to hy-

drolysis, enhances the resistance to mechanical and chemical exposure. TEGO® VariPlus is used in both clear coatings and as grinding resin in pigmented coatings.

TEGO® VariPlus SK

Co-binder for solventborne plastic coatings to improve hardness, gloss and adhesion. Also suitable for UV-coatings.

TEGO® VariPlus TC

Grinding resin for solventborne pigment concentrates with universal compatibility and solubility profile and excellent pigment wetting properties with all pigments.

TEGO® VariPlus DS 50

Solvent-free co-binder in waterborne clear and pigmented coatings or grinding resin in mill base. Excellent promotion of adhesion and pigment wetting. Hardness, gloss, adhesion and drying are improved.

TEGO® VariPlus – Recommended to be used in the following coating systems

Product	System	Compatibility
TEGO® VariPlus 1201 TF	S	PU, PU/acrylic, polyester
TEGO® VariPlus SK	S/UV	PU, PU/acrylic, acrylic, polyester
TEGO® VariPlus CA	S	PU, PU/acrylic, acrylic, polyester
TEGO® VariPlus TC	S/UV	utmost compatibility and solubility
TEGO® VariPlus DS 50	W	1- and 2-pack primer, base coat and top coat
TEGO® VariPlus UC	S/W/UV	utmost compatibility and solubility in all formulations

TEGO® VariPlus – Used as co-binders

Product	System	Flow, leveling	Block and scratch resistance	Recoatibility	Gloss improvement	Adhesion improvement	Hardness increase	Additional information
TEGO® VariPlus 1201 TF	S		•	•	•	•	•	fast drying, very hard but flexible, excellent heat stability
TEGO® VariPlus SK	S/UV		•	•	•	•	•	excellent heat stability, high hardness, cross-linkable alcohol groups
TEGO® VariPlus CA	S	○	○	•	•	•	•	cross-linkable alcohol groups
TEGO® VariPlus TC	S	○		•	•	•	○	utmost compatibility and solubility
TEGO® VariPlus DS 50	W		•	•	•	•	•	outstanding storage stability, fast drying
TEGO® VariPlus UC	S/W/UV	○		•	•	○		utmost compatibility and solubility in all formulations
TEGO® VariPlus 3350 UV	UV		•	•	•	•	•	in tripropylene glycol diacrylate



TEGO® AddBond

TEGO® AddBond products improve the adhesion of coatings on different plastic substrates. They also improve intercoat adhesion in multicoat finishes. TEGO® AddBond is essential for improving the bonding of aluminum pigments for producing high quality coatings effects. Furthermore, they help to enhance gloss and flexibility.

TEGO® AddBond LTW

Highly flexible co-binder in primer or base coat. Substrate wetting, adhesion improvement and excellent bonding of effect pigments in the film are achieved.

TEGO® AddBond DS 1300

Solvent-free co-binder for waterborne coatings to promote adhesion and substrate wetting.

TEGO® AddBond – Used as co-binders

Product	System	Aluminum pigment orientation/passivation	Recoatibility	Wetting & spreading on substrate	Gloss improvement	Adhesion improvement	Hardness increase	Additional information
TEGO® AddBond LTH	S/UV		•	•	•	•	•	substrate wetting of primer or base coat
TEGO® AddBond LTW	S/UV	•	•	•	•	•		excellent bonding in PU, PU/acrylic, acrylic, substrate wetting of primer or base coat, high flexibility
TEGO® AddBond DS 1300	W		•	•	•	•		substrate wetting of primer or base coat

• core properties ◦ additional effect

W = waterborne formulations S = solventborne formulations UV = energy-curable formulations

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