





Evonik. Power to create.

# TEGO Additives and Co-Binders for Inkjet Inks

In recent years, Inkjet technology has made substantial progress and is now one of the most promising printing technologies. Inkjet's greatest benefits are the broad possibilities it offers in variable printing and personalization. The non-impact inkjet printing process also offers a high degree of flexibility in printing motifs and substrate options.

Aside from the well-established home office inkjet printing, the industrial inkjet sector is becoming a main application field. Due to technological progress production speeds have increased such that inkjet is not only utilized for short run printing jobs, but it is also utilized in mass production. Additionally, inkjet has become a feasible solution to print plastics, cardboard, tiles, textiles, etc.

Inkjet is very versatile, it also presents some challenges. We are confident that our knowledge can assist in overcoming these challenges.

Additives and co-binders from Evonik Industries help to improve inkjet formulations. TEGO additives control ink interfaces in radiation-curing, waterborne and solventborne formulations, while TEGO co-binders promote better adhesion and enhanced ink properties.

# TEGO Additives and Co-Binders for Solventborne Inkjet Inks

### **TEGO<sup>®</sup> Dispers 670**

high performance pigment wetting and dispersing additive for universal use with organic pigments

- provides excellent viscosity reduction and leads to stable Newtonian flow behavior
- stabilizes small pigment particles

#### **TEGO<sup>®</sup>** Dispers 672

wetting and dispersing additive with outstanding performance for organic and carbon black pigments

- broadly compatible
- offers high storage stability of concentrates

#### TEGO<sup>®</sup> Glide 410

surface control additive which improves anti blocking, flow and slip

very compatible

# co-binder to improve adhesion to several substrates

**TEGO<sup>®</sup> VariPlus SK** 

improves gloss and hardness

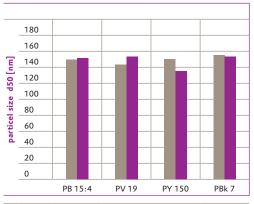
# TEGO<sup>®</sup> VariPlus 1201 TF

co-binder for mechanical resistance, gloss and better adhesion to plastic substrates

improves pigment wetting







after 3 weeks at 50° C

before storage

viscosity [mPas] at shear rate 100 [1/s]

14

12

10

8

6

4

2

0

PB 15:4

All pigments tested with 15% pigment load in eco solvent (e.g. butylglycolacetate)

before storage

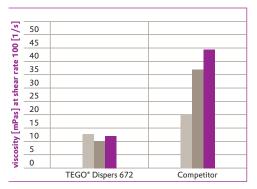
# PBk 7 (NIPex<sup>®</sup> 150) 15% in Eco-Solvent

PV 19

after 3 weeks at 50°C

PY 150

PBk 7



before storage after 1 week at 50°C after 3 weeks at 50°C

# **TEGO Additives for Waterborne Inkjet Inks**

#### **TEGO<sup>®</sup>** Dispers 750 W

polymeric high-performance wetting and dispersing additive providing excellent pigment stabilization and shelf stability

• outstanding performance for carbon blacks and organic pigments

#### **TEGO<sup>®</sup>** Dispers 760 W

pigment wetting and dispersing additive suitable for organic pigments and for carbon blacks

 strongly reduces viscosity and improves flow behavior while yielding very small particles and distributions

### **TEGO<sup>®</sup>** Dispers 740 W

dispersing additive especially for indirect food applications:

- in accordance with FDA 21 CFR 175.105
- in accordance with FDA 21 CFR 175.300
- in accordance with FDA 21 CFR 176.210
- Swiss A compliant

# TEGO<sup>®</sup> Wet 240

substrate wetting additive with strong reduction of static surface tension

helps wetting on various substrates

#### TEGO<sup>®</sup> Wet 500

substrate wetting additive and the first choice when excellent reduction of dynamic surface tension is required

- works well on the typical packaging substrates like coated and uncoated paper or PE- and PET-films
- shows low foaming tendency

## **TEGO<sup>®</sup>** Foamex 830

silicone-free defoamer for grinding stage

highly compatible and Swiss A compliant

#### **TEGO<sup>®</sup>** Foamex 805 N

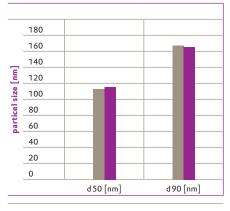
- defoamer emulsion
- easy to incorporate
- recommended especially for pigmented inks

# **TEGO<sup>®</sup> ViscoPlus 3010**

rheology modifier

- for fine tuning of ink viscosity
- · keeps Newtonian flow behavior

#### Storage stability test of an inkjet concentrate (PY 150) stabilized with TEGO° Dispers 760 W



before storage after 3 weeks at 50° C

#### Trademark

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Mentioned trademarks NIPex<sup>®</sup>

Registered trademark of orion Engineered Carbons



# TEGO Additives and Co-Binders for Radiation-Curing Inkjet Inks

# **TEGO<sup>®</sup>** Dispers 685

tailor-made high performance pigment wetting and dispersing additive for organic and carbon black pigments

- excellent viscosity reduction and color strength
- solvent-free and liquid at room temperature for easy handling
- 100% active matter

#### TEGO<sup>®</sup> Rad 2200 N

crosslinkable surfactant to improve wetting and slip

very compatible

# TEGO<sup>®</sup> Glide 432

highly effective glide additive which creates slip properties on ink film

strongly improves wetting behavior

# TEGO<sup>®</sup> Airex 920

highly compatible, silicone-free deaerator with good stability in low viscosity formulations for printing inks and varnishes

- solvent-free
- maintains reprintability

## **TEGO<sup>®</sup> VariPlus 3350 UV**

polyester based co-binder

 improved adhesion on critical substrates

# **TEGO<sup>®</sup> VariPlus SK**

co-binder for mechanical resistance and gloss

better adhesion to plastic substrates

#### Masthead

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