



DELTA-DC® 3590

DELTA-DC® 3590 is a cost-effective polyacrylate-based high molecular weight dispersion control additive for aqueous coatings and printing inks. It prevents reflocculation of pigments through steric hindrance and therefore stabilizes the color strength and hue of pigments in pigment concentrates.

Specifications:

Composition	:	Modified polyacrylate
Solvent(s)	:	Water/TPM (Tripropyleneglycolmethylether)
Specific gravity @ 20°C	:	ca. 1.04 g/cm ³
Amine value	:	36-42 mg KOH/g
Acid value	:	4-8 mg KOH/g
Appearance	:	Turbid and yellowish liquid
Active ingredients	:	41.5%

Methods of analysis can be received upon request

Applications and usage:

►Coatings

DELTA-DC® 3590 is a cost-effective high molecular weight dispersion control additive for enhancing the dispersion of organic/inorganic pigments and carbon blacks in aqueous media.

DELTA-DC® 3590 is compatible with a wide range of resin and vehicle systems and considered suitable for VOC-free applications. It can be used in resin-containing as well as in resin-free applications to produce pigment concentrates for water-based coatings.

DELTA-DC® 3590 stabilizes the pigment dispersion of all kinds of pigments and provides the following properties:

- Reduced viscosity of the mill-base leading to higher pigment loading
- Excellent gloss
- Flocculation stability
- Anti-flooding behavior
- Broader compatibility

DELTA-DC® 3590 is pH-independent, completely water-soluble and does not require neutralization.

DELTA-DC® 3590 should be incorporated in the mill-base before adding the pigments.

Inorganic pigments : 10% of oil absorption value (solid form)

Organic pigments : 30-50% of BET value (solid form)

Carbon blacks : 25-30% of DBP value (solid form)

When used in resin-free pigment concentrates, the following addition levels are advised:

Inorganic pigments : 15-25% of oil absorption value (solid form)

Organic pigments : 30-60% of BET value (solid form)

Carbon blacks : 50-60% of DBP value (solid form)

►Printing inks

DELTA-DC® 3590 is a polymeric dispersant for enhancing the dispersion of organic pigments in aqueous media. This results in:

- Lower viscosity of concentrates and/or increased pigment loading
- Improved color strength, transparency and gloss of inks

DELTA-DC® 3590 is pH-independent, completely water-soluble and does not need to be neutralized. It has no detrimental impact on the resistance properties of the dried film.

DELTA-DC® 3590 has been developed for water-based pigment bases and printing ink formulations for flexographic application. It is considered suitable for VOC-free applications and can be used with a wide range of industry pigments and carbon blacks.

DELTA-DC® 3590 is compatible with a wide range of resin/vehicle systems.

DELTA-DC® 3590 should be incorporated in the mill-base.

Organic pigments : 25-50% of BET value (solid form)

Carbon blacks : 20-30% of DBP value (solid form)

In resin-free pigment concentrates, the optimal use level may be higher.

Safety and Handling:

DELTA-DC® 3590 should be handled in accordance with good industrial practice. Detailed information can be found in the Safety Data Sheet.

Storage:

DELTA-DC® 3590 should be stored in a cool dry place. When kept in an original unopened container, it will keep up to 5 years from the date of manufacture. The production date is indicated on the container.

Packaging:

50 kg and 200 kg non-returnable metallic containers.
