

Technical Data Sheet

Last revised: 01-2019

DELTA-DC® 3401

DELTA-DC® 3401 is a polyacrylate-based high molecular weight wetting and dispersing additive for solvent-based **coatings** and solvent-based **printing inks**. It prevents reflocculation of pigments through steric hindrance and therefore stabilizes the color strength and hue of pigments in paints and pigment concentrates. **DELTA-DC® 3401** shows a wide compatibility, from low- to high-polarity systems, including nitrocellulose.

Specifications:

Composition	: Modified polyacrylate
Solvent(s)	: Butylacetate/s-butanol
Specific gravity @ 20°C	: ca. 0.95 g/cm ³
Flashpoint	: 24 °C
Amine value	: 48-52 mg KOH/g
Active ingredients	: 50%

Methods of analysis can be received upon request

Applications and usage:

Coatings

DELTA-DC® 3401 is a high molecular weight wetting and dispersing agent that has been developed for high performance solvent-based coatings. Due to its high molecular weight and resin-like structure, **DELTA-DC® 3401** does not influence paint binder durability. **DELTA-DC® 3401** should be used to stabilize difficult pigments (such as Dipyrrolopyrrol pigments 'DPP'). Pigment grinds with **DELTA-DC® 3401** are fully compatible with pigment grinds containing other high molecular weight dispersants like **DELTA-DC® 3046**.

DELTA-DC® 3401 enhances processing of pigment bases during grinding and enables higher pigment loads to be achieved.

This results in:

- Improved color strength
- Lower viscosity
- Higher gloss
- Reduce dispersion time

Care must be taken with **DELTA-DC® 3401** as it has a tendency to yellowing or gelling when used in combination with chlorinated polymers. With solvent-free epoxies it has tendency to yellowing.

DELTA-DC® 3401 is recommended in all kinds of high quality solvent-based industrial coatings including automotive topcoats, as well as in pigment concentrates.

DELTA-DC® 3401 should be incorporated in the mill-base before adding the pigments.

Inorganic pigments	: <u>10% of oil absorption value (solid form)</u>
Organic pigments	: <u>30-50% of BET value (solid form)</u>

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Carbon blacks : **15-25% of DBP value (solid form)**

Printing Inks

DELTA-DC® 3401 has been developed for solvent-based formulations.

It has broad solubility behavior and will be suited to a wide variety of resin systems.

DELTA-DC® 3401 can be used in solvent-based liquid inks and pigmented bases. **DELTA-DC® 3401** will also be effective in UV-curable, screen and gravure printing ink formulations.

DELTA-DC® 3401 should not be used with chlorinated polymers or epoxides due to tendency of these combinations to yellowing and/or gellation.

For best results, **DELTA-DC® 3401** should be combined with the pre-blended liquid portion of the mill-base formulation before addition of the pigment.

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

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

Safety and Handling:

DELTA-DC® 3401 should be handled in accordance with good industrial practice. Detailed information can be found in the Safety Data Sheet

Storage:

DELTA-DC® 3401 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 190 kg non-returnable metallic containers.
