Technical Data Sheet

Last revised: **01-2019**

DELTA-DC® 4065

DELTA-DC® 4065 is a wetting and dispersing additive for enhancing the dispersion of inorganic pigments and stabilizing the suspension of special effect pigments in solvent-based media. It is designed to prevent flooding and floating and hard sedimentation. **DELTA-DC® 4065** can be used in **coatings** and **printing inks.**

Specifications:

Composition	:	unsaturated polycarboxylic acid combined with a modified polysiloxane
Solvent(s)	:	Alkylbenzene/diisobutylketone
Specific gravity @ 20°C	:	ca. 0.95 g/cm3
Flashpoint	:	40 °C
Appearance	:	Transparent, slightly brownish liquid
Acid value	:	100-140 mg KOH/g
Active ingredients	:	52%

Methods of analysis can be received upon request

Applications and usage:

Coatings

Wetting and dispersing additive for solvent-based systems to improve the pigment wetting and stabilize the pigment dispersion. It produces a controlled flocculation of pigments and extenders and therefore prevents flooding/floating and hard sedimentation. It is also used in amine-neutralized aqueous coatings, but it is not compatible with mineral spirits or paints, which are diluted with mineral spirits.
DELTA-DC® 4065 is suitable for medium- to high-polar systems such as:

- Nitrocellulose systems
- Alkyd/amino resin combinations
- Polyurethane and chlorinated polymer systems
- Acrylic polyisocyanate systems (two-pack acrylics)

DELTA-DC® 4065 is particularly effective in preventing flooding of titanium dioxide in combination with other color pigments. It is often used in conjunction with high molecular weight dispersants such as **DELTA-DC® 3046** or **DELTA-DC® 3009** as an effective co-grinding dispersant, especially in a ration of 3:1 (3 pbw of high molecular weight dispersant with 1 pbw **DELTA-DC® 4065).**
DELTA-DC® 4065 contains a small amount of a very compatible organically modified polysiloxane, which makes it very helpful in preventing Benard cells and Silking. This compatible polysiloxane will also improve surface slip, orientation of flatting agents and aluminum flakes; and increase gloss in the final coating.
When used in anti-corrosion primers, in many cases the protective properties are enhanced.
DELTA-DC® 4065 should be added prior to the dispersion process.
0.5-2.5% (delivery form) on inorganic pigments

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Printing Inks

DELTA-DC® 4065 is a dispersant for enhancing the dispersion of inorganic pigments and stabilizing the suspension of special effect pigments in solvent-based media. This results in:

- Improve dispersion or suspension stability
- Imorove color strength
- Lower viscosity and/or higher pigment loading
- Higher gloss or luster

DELTA-DC® 4065 is suited for solvent-based formulation. It is very effective in stabilizing TiO_2 and activating rheological modifiers such as Bentonites and other activated fillers. It is also effective with metallic flakes and special effect pigments.

DELTA-DC® 4065 is particularly suitable for nitrocellulose-based flexographic applications and for screen printing.

For best results, **DELTA-DC® 4065** should be combined with the pre-blended liquid portion of the mill-base formulation before addition of the pigment and prior to the dispersion process. It may also be used in 'technology let-down varnishes' as a post-additive to aid in the subsequent incorporation of pigmented "universal " bases.

1.0-5.0%(delivery form) on TiO_2
5.0-10% (delivery form) on Bentonites/thickeners

Safety and Handling:

DELTA-DC® 4065 should be handled in accordance with good industrial practice. Detailed information can be found in the Safety Data Sheet.

Storage:

DELTA-DC® 4065 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:

55 kg and 180 kg non-returnable metallic containers.