

Technical Data Sheet

Last revised: **01-2019**

DELTA-DC® 4242

DELTA-DC® 4242 is an anionic wetting and dispersing agent for inorganic and organic pigments; and fillers/extenders. It is suited for solvent-based, solvent-free and water-based applications. Reduced viscosity can be obtained in the mill-base or pigment concentrate when combined with high molecular weight dispersants. **DELTA-DC® 4242** can be used in **coatings, printing inks** and **composite**.

Specifications:

Composition	: Aliphatic polyether with acidic groups
Specific gravity @ 20°C	: ca. 1.05 g/cm ³
Appearance	: Clear, yellowish liquid (turbid at low temperatures)
Acid value	: 95-105 mg KOH/g
Active ingredients	: >98%

Methods of analysis can be received upon request

Applications and usage:

Coatings

DELTA-DC® 4242 is a wetting and dispersing agent for inorganic and organic pigments; and fillers/extenders in solvent-based, solvent-free and water-based systems. The advantages are:

- Reduced grinding and dispersion time
- Improved gloss and flow
- Increased pigment loading in the mill-base or pigment concentrate enabling to achieve VOC levels below 250 g/l in highly filled solvent-based systems

DELTA-DC® 4242 can be used in all solvent-based and solvent-free industrial and decorative coating systems. It is especially suitable for wetting, dispersion and stabilization of inorganic pigments and fillers in solvent-free systems. **DELTA-DC® 4242** can also be used to decrease the viscosity in the millbase or pigment concentrate when combined with high molecular weight dispersants.

When used in water-based applications, it is recommended to neutralize **DELTA-DC® 4242** with an amine to pH 7.5 - 8.0 to make it water-soluble.

DELTA-DC® 4242 should be added prior to the dispersion process.

2.0-4.0% on inorganic pigments or fillers/extenders

5.0-7.0% on organic pigments

Printing Inks

DELTA-DC® 4242 improves the pigment wetting and reduces the dispersion time of inorganic pigments (particularly TiO₂) and a few organic pigments. Deflocculation of pigments when using **DELTA-DC® 4242** can lead to improved gloss, rheology and levelling of the final ink.

It has broad solvent compatibility and is suitable for use in both alcohol- and acetate-reduced nitrocellulose printing inks and pigmented bases. **DELTA-DC® 4242** is well-suited to packaging flexographic applications.

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For best results, **DELTA-DC® 4242** should be combined with the pre-blended liquid portion of the mill-base formulation before addition of the pigment.

2.0-5.0% on inorganic pigments

5.0-8.0% on organic pigments

Composite

DELTA-DC® 4242 facilitates the incorporation of fillers and pigments in PVC-Plastisols and solventfree epoxy floorings. Through this improvement of the dispersing process, a more homogeneous distribution of fillers/extenders and pigments is achieved. In addition, a strong viscosity reduction is obtained. The dispersing of organic pigments in plasticizers or other liquid phases can result in increased color strength.

DELTA-DC® 4242 is especially suitable for wetting, dispersion and stabilization of inorganic pigments and fillers in solvent-free epoxy and polyurethane systems, like flooring or pipe-line coatings.

DELTA-DC® 4242 should be mixed with the plasticizer prior to the addition of the fillers/extenders and pigments.

2.0-4.0% on inorganic pigments and fillers/extenders

5.0-7.0% on organic pigments

Safety and Handling:

DELTA-DC® 4242 should be handled in accordance with good industrial practice. Detailed information can be found in the Safety Data Sheet.

Storage:

DELTA-DC® 4242 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 200 kg non-returnable metallic containers.
