



Product Data Sheet

ADD-4401

GENERAL

ADD-4401 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. **ADD-4401** 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%

APPLICATIONS AND USAGE

Coatings:

ADD-4401 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, **ADD-4401** does not influence paint binder durability.

ADD-4401 should be used to stabilize difficult pigments (such as Dipyrrolopyrrol pigments 'DPP'). Pigment grinds with **ADD-4401** are fully compatible with pigment grinds containing other high molecular weight dispersants like **ADD-4401**.

ADD-4401 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 **ADD-4401** 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.

ADD-4401 is recommended in all kinds of high quality solvent-based industrial coatings including automotive topcoats, as well as in pigment concentrates.

ADD-4401 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: **15-25% of DBP value** (solid form)

Printing Inks:

ADD-4401 has been developed for solvent-based formulations. It has broad solubility behavior and will be suited to a wide variety of resin systems.



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ADD-4401 can be used in solvent-based liquid inks and pigmented bases.

ADD-4401 will also be effective in UV-curable, screen and gravure printing ink formulations.

ADD-4401 should not be used with chlorinated polymers or epoxides due to tendency of these combinations to yellowing and/or gellation.

For best results, **ADD-4401** 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)

STORAGE, SAFETY & HANDLING

ADD-4401 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. **ADD-4401** should be handled in accordance with good industrial practice.

Detailed information can be found in the Safety Data Sheet.