CERAFLOUR 1050

PTFE-free micronized polyethylene wax additive for improving the scratch and abrasion resistance and increasing the surface slip of aqueous, solvent-borne, solvent-free, and UV coating systems. Function and efficiency comparable to typical PE/PTFE wax additives.

Product Data

Composition
Micronized polyethylene wax

Typical Properties
The values indicated in this data sheet describe typical properties and do not constitute specification limits.

Density (20 °C):	0.97 g/ml
Melting point:	125 °C
Particle size distribution (laser diffraction, volume distribution):	D50: 5 µm, D90: 10 µm
Supplied as:	Micropowder

Storage and Transportation
Temperature sensitive. To be stored and transported at a temperature below 50 °C.

Applications

Coatings Industry

Special Features and Benefits
The mechanical properties of CERAFLOUR 1050 are comparable to those of a typical PE/PTFE wax. The additive improves the scratch and abrasion resistance of aqueous, solvent-borne, solvent-free, and UV coating systems. The surface slip is slightly increased. As a result of the extra-fine particle size distribution, the additive can also be used in clearcoats and in coating systems with low film thickness. It has only a very minor effect on gloss and haze, which means it is especially recommended for clearcoats and haze-sensitive systems. In aqueous systems, CERAFLOUR 1050 has matting properties due to the particularly good orientation toward the surface. In such systems, the organic cosolvent content should be at least 5-10 % in order to avoid creaming of the wax additive.

Recommended Use

General industrial coatings	■
Wood and furniture coatings	■
Can coatings	■
Coil coatings	■
Architectural coatings	□

■ especially recommended □ recommended

Recommended Levels

0.2-5 % additive (as supplied) based on the total formulation.

The above recommended levels can be used for orientation. Optimal levels are determined through a series of laboratory tests.

Incorporation and Processing Instructions

The additive is preferably incorporated into the coating at a medium shear rate at the end of the production process. The temperature should remain below 40 °C to prevent swelling of the wax particles. Alternatively, CERAFLOUR 1050 can be pre-dispersed in these organic solvents or in a mixture of these solvents and binders that are components of the respective coating formulation. This facilitates the incorporation. A typical dosage for pre-dispersion is between 15 % and 25 % CERAFLOUR 1050. Pre-dispersion in water is not possible.

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