Technical Information

Efka® PL 5590

(old: Dehysol® 190)



general

Efka® PL 5590 is a plasticizer for plastisols

Efka[®] PL 5590 is soluble in the usual solvents like alcohols, esters, ketones, diethyl ether, glycol ether, glycol acetate, chlorinated hydrocarbons, aliphatic, cycloaliphatic and aromatic hydrocarbons.

Efka[®] PL 5590 is compatible with the normal plasticizers used for PVC processing, and it is miscible with them in any proportion. It is insoluble in water.

Efka® PL 5590 is incompatible with plasticizers containing hydroxyl groups of the type used for acetyl cellulose.

As a secondary plasticizer, Efka[®] PL 5590 has limited compatibility with polyvinyl chloride, vinyl chloride polymers, polyesters, polyacrylates, chlorinated rubber, polyvinyl ethers and polystyrenes.

chemical nature

ester of an aliphatic monocarboxylic acid

Properties

physical form

clear liquid

shelf life

Subject to appropriate storage under the usual storage and temperature conditions, our products are durable for at least 2 years.

typical properties (no supply specification)

acid value	< 0.5 mg KOH/g
saponification value	~ 145 mgKOH/g
lodine colour value	< 2
density at 20 °C (68 °F)	~ 0.863 g/cm3
refractive index, 20 °C	~ 1.453
Brookfield viscosity at 23 °C (73 °F)	~ 13.5 mPa⋅s
hydroxyl value	< 3.0 mg KOH/g
Iodine value	~ 41 g l /100 g

Application

Efka® PL 5590 is used as secondary plasticizer in nitrocellulose paints and as viscosity depressant for PVC pastes. When it is processed in conjunction with good primary plasticizers, it may be used in amounts up to 15%. Efka® PL 5590 is almost non-yellowing. Up to 100% of Efka® PL 5590 and more can be incorporated in nitrocellulose, yielding very long-lasting films with excellent water resistance. Efka® PL 5590 considerably increases the low temperature stability and improves the surface gloss of plasticized articles. Efka® PL 5590 is almost non-volatile even when exposed to high temperatures for a long time, hence its remarkable ageing resistance.

recommended concentrations

dosage is recommended in PVC pastes in combination with primary plasticizers up to 15%, in NC paints up to 100% relating to the nitrocellulose.

Safety

When handling these products, please comply with the advice and information given in the safety data sheet and observe protective and workplace hygiene measures adequate for handling chemicals.

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights, etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. The agreed contractual quality of the product results exclusively from the statements made in the product specification. It is the responsibility of the recipient of our product to ensure that any proprietary rights and existing laws and legislation are observed.

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