

# Efka<sup>®</sup> PL 5382

## general

epoxy plasticizer for the paint industry

- standard epoxy plasticizer
- good stabilizing effect
- extraction-resistant to cleaning materials and many industrial agents
- migration resistance is comparable with polymeric plasticizers

## chemical nature

soybean oil, epoxidized

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## Properties

### physical form

light yellow liquid

### storage

It is recommended to protect Efka<sup>®</sup> PL 5382 from heat and frost. Epoxidized soya bean oils tend to crystallize and solidify at temperatures below 15°C. This does not affect the quality of the product and can be reversed by heating. Therefore they should be stored at warm and dry conditions, preferably at 20 – 25°C.

### typical properties (no supply specification)

oxirane content	~ 6.7%
acid value	~ 0.15 mg KOH/g
iodine value	~ 1.25 g I / 100 g
iodine color index	~ 1.25
refractive index	~ 1.472

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## Application

Efka® PL 5382 epoxy plasticizer is both a high-quality stabilizer and valuable plasticizer. It protects paints and plastics against the influence of heat, light and weather, and thereby improves whiteness and resistance to ageing. It is compatible with PVC, many other plastics, synthetic resins, plasticizers and gives transparent films. It can be hardened with acids, anhydrides, and amines. Moreover, it remains stable even at higher temperatures.

In addition, the Efka® PL 5382 plasticizer also has a wetting and emulsifying effect, which is a property that is advantageous in the manufacture of pigment pastes. Epoxy plasticizers also have a favorable influence on the viscosity stability of plastisols, especially the alkyl epoxy stearates which have a viscosity-decreasing effect. The difficulties with respect to levelling, gloss retention and yellowing, which often occur with epoxy paints, can largely be reduced by the simultaneous utilisation of Efka® PL 5382 epoxy plasticizer. The compatibility is dependent on the binder and must therefore be checked in each individual case.

Efka® PL 5382 consisting of epoxidized soybean oil, is a high-quality epoxy plasticizer with an epoxide oxygen content of more than 6.3%. It not only excels by its high oxirane content and the low residual iodine value, but also by its neutral smell and taste.

### recommended concentrations

for the fabrication of vinyl resins the addition of 10 -15% to the total plasticizer content will generally be sufficient. Only in special cases it should be necessary to increase this amount up to 30%.

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**Validity**

This Technical Data Sheet is valid for all versions of the Efka® PL 5382.

**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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