

HARD UNSATURATED WAX FREE POLYESTER RESIN

INTRODUCTION

EBECRYL® 4175 is a hard unsaturated wax-free polyester resin recommended for use in cost-effective UV-curing primers and coatings for wood.

EBECRYL® 4175 is diluted with 25% dipropylene glycol diacrylate (DPGDA).

COMPATIBILITY

Generally speaking, EBECRYL® 4175 is compatible with other acrylic monomers and oligomers. However, the compatibility should always be tested, especially with respect to the addition of other resins and additives.

SUGGESTED APPLICATIONS

EBECRYL® 4175 is used in formulation of radiation-curing (UV and EB) coating for application by roller coating, spraying and curtain coating on wood, cork and furniture.

EBECRYL® 4175 can be used to formulate clear high-gloss to matt UV-curing systems.

PERFORMANCE DATA

Formulations based on EBECRYL® 4175 are recommended for:

- UV and EB cured roller primers and coatings
- curtain coater applied coatings for wood, cork and furniture.

SPECIFICATIONS

Viscosity at 23°C, mPa.s	26500 ± 4500
Colour, Apha	max. 200

GENERAL PROPERTIES

Acid number, mg KOH/g	20 ± 3
Density, g/cm³	approx 1.15
Flash point °C	> 100

SOLUBILITY

Toluene, Xylene	Partly soluble
Aliphatic hydrocarbons	Insoluble
Alcohols	Partly soluble
Esters	Soluble
Ketones	Soluble

SUGGESTED FORMULATION

EBECRYL® 4175 can be used to formulate clear high-gloss to matt UV-curing systems. The amount of photoinitiator added depends on the reactivity required and on the acrylic monomer or oligomer used to adjust the viscosity of the system.

For roller coating at a thickness of approx. 40 µm, for example, DPGDA can be used to adjust the viscosity to approx. 2000 mPa.s. Afterwards 5% PI is added, calculated on the polymerisable substance, to give a belt speed of approx. 7 m/min under an 80 Watt lamp.

This results in a film with good hardness and high gloss. To achieve matting effects, we recommend trial with Gasil® HP240 (Crosfiled) or Sylloid® ED products (Grace).

STORAGE AND HANDLING

Storage in original sealed allnex containers.

Recommended storage temperature : -5 to + 35°C

Protect from intense radiation (light, UV), heat and foreign material.

allnex guarantees that for a period of 24 months following the day of manufacturing, the product will meet the specifications or values set forth in section "specifications or characteristic data" above, whatever is applicable, provided that the product is stored in full compliance with the storage conditions set forth in and referenced under section "storage" above and is otherwise handled appropriately.

The lapse of the 24 months period does not necessarily mean that the product no longer meets specifications or the set values. However, prior to using said product, allnex recommend to test such a product if it still meets the specifications or the set values. allnex does not make any guarantees regarding the product after the lapse of the 24 months period and allnex shall not be responsible or liable in any way for the product failing to meet specifications or the set values after the lapse of the 24 months period.

PRECAUTIONS

For Statutory Labeling information, please refer to Safety Data Sheet.