

DILUTED ACID FUNCTIONAL RESIN

INTRODUCTION

EBECRYL® 780 is a unique specialty oligomer that combines high (meth)acrylate and acid functionality into a single molecule. This combination provides a unique combination of reactivity and advanced adhesion properties upon cure.

PERFORMANCE HIGHLIGHTS

Coatings based on EBECRYL® 780 are characterized by:

- Good adhesion on metal, vacuum metallized and glass substrates
- Excellent hardness
- Being tack free after physical drying
- Providing good boiling water resistance
- Being Sn free

The actual properties of UV/EB cured products also depend on the selection of the other formulation components, such as reactive diluent(s), additives and photo initiators.

SUGGESTED APPLICATIONS

EBECRYL® 780 is recommended to be used in spray formulation in combination with other UV curable materials such as monomers or oligomers. The resin is suitable especially for vacuum metallization topcoat for vacuum metallized cosmetic and filmic applications.

PHYSICAL PROPERTIES

C&P viscosity at 25°C, mPa.s	± 15000
Density, g/cm ³	1.12
Colour, Gardner	max. 2
Acid value, mg KOH/g	± 140
Functionality, theoretical	8
Oligomer content, % by weight	70
2-methoxy-1-propanol, % by weight	30

TYPICAL CURED PROPERTIES

Young's modulus, MPa	2270
Tensile strength, MPa	3.4
Tensile elongation, %	0.2
Glass transition temperature, °C	140

STORAGE AND HANDLING

Care should be taken not to expose radiation curable products to temperatures exceeding 40°C for prolonged periods or to direct sunlight. This might cause uncontrollable polymerization of the product with generation of heat.

Storage and handling should be in stainless steel, amber glass, amber polyethylene or baked phenolic lined containers. Do not store this material under an oxygen free atmosphere. Use dry air to displace material removed from the container. This material should not be stored for more than 2 years.

PRECAUTION

The following is a summary of the precautions to be taken when handling this product. Please refer to the Safety Data Sheet for further details.

The toxicological properties of this material have not been fully determined. Products of this type can be expected to be eye and skin irritant and have the potential to cause sensitization or other allergic responses. Appropriate precautions should be taken to avoid eye and skin contact and to avoid inhalation of the aerosols or vapours. Consult the relevant Safety Data Sheet for appropriate handling procedures and protective equipment prior to using this or any other material referred to in this bulletin.

See Safety Data Sheet for emergency and first aid procedures.

STATUTORY LABELING

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