

ALIPHATIC URETHANE ACRYLATE

INTRODUCTION

EBECRYL® 5130 is a low viscous hexafunctional aliphatic urethane acrylate that provides extremely fast cure response when exposed to ultraviolet light (UV) or electron beam (EB). Cured films of EBECRYL® 5130 exhibit high hardness and low - yellowing on top of outstanding mechanical and chemical resistances. It is particularly suitable for spray applications.

PERFORMANCE HIGHLIGHTS

EBECRYL® 5130 is characterized by:

- Light color
 - Low viscous liquid at room temperature
- UV/EB cured products containing EBECRYL® 5130 are characterized by the following performance properties:
- Good pigment wetting
 - Fast curing speed with pigment
 - Good water resistance, in clear and pigmented
 - Scratch and abrasion resistance
 - Good flexibility
 - High surface hardness
 - Chemical resistance

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

SUGGESTED APPLICATIONS

Formulated UV/EB curable products containing EBECRYL® 5130 may be applied via brush, roller, direct or reverse roll, offset gravure, metering rod, slot die, knife over roll, air knife, curtain, immersion and spin coating methods, as well as screen printing.

EBECRYL® 5130 is recommended for use:

- Hard coatings for plastics and optical films
- As an additive to improve cure speed, solvent resistance, scratch resistance and abrasion resistance.
- In clear and pigmented coatings for paper, paperboard, wood, rigid plastics, filmic substrates.
- Spray coating applications.

TYPICAL VALUES

Appearance	Clear liquid
Solid content, %	100
Color, Gardner	max. 1
Functionality, theoretical	6
Viscosity @ 60.0°C, mPa.s	340 - 520

STORAGE AND HANDLING

Before using EBECRYL® 5130, consult the Safety Data Sheet for additional information on safety and handling procedures, and recommended personal protective equipment.

The recommended storage temperature range for EBECRYL® 5130 is 4°C to 40°C (39°F to 104°F). Care should be taken not to expose the product to high temperature conditions, direct sunlight, ignition sources, oxidizing agents, alkalis or acids. This might cause uncontrollable polymerization of the product with the generation of heat. Storage and handling should be in stainless steel, amber glass, amber polyethylene or baked phenolic lined containers. Procedures that remove or displace oxygen from the material should be avoided. Do not store this material under an oxygen free atmosphere. Dry air is recommended to displace material removed.

See Certificate of Analysis (CoA) for the actual shelf life of EBECRYL® 5130.

PRECAUTION

Avoid contact with eyes and skin. Direct contact with this material may cause severe eye and moderate skin irritation. Contact with skin may cause a cross-allergic reaction in persons already sensitized to acrylate materials. Wash thoroughly after handling. Keep container tightly closed. Use with adequate ventilation.

STATUTORY LABELING

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