

ALIPHATIC URETHANE DIACRYLATE/MMA BLEND

INTRODUCTION

EBECRYL® 231 is an aliphatic urethane diacrylate blended with 20% by weight methyl methacrylate (MMA). Films of EBECRYL® 231 cured by radical polymerization are flexible, tough, and resistant to yellowing. EBECRYL® 231 is often used as a modifier to improve the flexibility and toughness of radical cured polymers.

PERFORMANCE HIGHLIGHTS

EBECRYL® 231 is characterized by:

- Light color
- Low viscosity

Cured products containing EBECRYL® 231 are characterized by the following performance properties:

- Improved flexibility and toughness
- Reduced yellowing

The actual properties of the cured product also depend on the selection of other formulation components such as reactive diluents, additives and initiators.

SUGGESTED APPLICATIONS

EBECRYL® 231 is recommended for use in:

- Increasing flexibility and toughness of radical cured polymers
- Laminating adhesives
- Coatings for plastic and metal

SPECIFICATIONS

Appearance	Clear to cloudy liquid
Color, Apha	max. 50
Viscosity, 25°C, mPa.s	1000 - 2000

TYPICAL PHYSICAL PROPERTIES

Density, g/cm ³ at 25°C	1.06
Functionality, theoretical	2
MMA, % by weight	20
Oligomer, % by weight	80

PRECAUTIONS

Before using EBECRYL® 231, see the Safety Data Sheet (SDS) for information on the identified hazards of the material and the recommended personal protective equipment and procedures.

STORAGE AND HANDLING

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 from the container.

It is recommended that EBECRYL® 231 be stored in accordance with the National Fire Protection Association (NFPA) 30: Flammable and Combustible Liquids Code for Class I Flammable Liquids (flashpoint <37.8 °C).