

MODIFIED BISPHENOL A EPOXY DIACRYLATE

### INTRODUCTION

EBECRYL® 3203 is a low viscosity modified Bisphenol-A based epoxy acrylate oligomer that provides exceptional pigment wetting properties for black and white inorganic pigments and fillers. EBECRYL® 3203 gives a fast cure response when formulated with other oligomers cured via ultraviolet light (UV) or electron beam (EB). EBECRYL® 3203 is used for the preparation of high pigment loading pigment pastes produced using a 3-roll mill or bead mill.

### PERFORMANCE HIGHLIGHTS

EBECRYL® 3203 is characterized by:

- Low viscosity
- Excellent pigment wetting properties

UV/EB curable formulated products containing EBECRYL® 3203 are characterized by:

- Good cure response

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

### SUGGESTED APPLICATIONS

High loading pigment paste formulations prepared using EBECRYL® 3203 are used in the production of UV/EB curable inks intended for use primarily in flexography, gravure and UV ink-jet. The ability to produce highly loaded pigment pastes allows the ink formulator more latitude by using less pigment paste to achieve a given optical density.

### TYPICAL 3-ROLL MILL PIGMENT PASTE FORMULATIONS

	<b>Black</b>
EBECRYL® 3203	49.5
Solsperse® 24000 <sup>(1)</sup>	5.5
Special Black 250 <sup>(2)</sup>	45.0

<sup>(1)</sup> Product of Lubrizol Corp.

<sup>(2)</sup> Product of Orion Engineered Carbons

### SPECIFICATIONS

Appearance Clear liquid

### TYPICAL PHYSICAL PROPERTIES

Acid value, mg KOH/g	< 0.35
Color, Gardner	< 2
Density, g/cm <sup>3</sup> at 25°C	1.15
Epoxy content, %	< 0.1
Flash point, Setaflash, °C	> 100
Functionality, theoretical	2.7
Viscosity at 25°C, mPa.s	950

### PRECAUTIONS

Before using EBECRYL® 3203, 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. Wash thoroughly after handling. Keep container tightly closed. Use with adequate ventilation.

See the SDS for the recommended storage temperature range for EBECRYL® 3203.