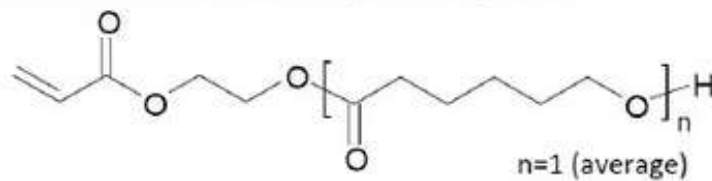


# PLACCEL FA1DDM

## Epsilon-Caprolactone-modified Hydroxyalkyl Acrylate

### <Description>

PLACCEL FA1DDM is macromonomer having an acrylic double bond and a primary hydroxyl group. Copolymerization with PLACCEL FA1DDM introduces primary hydroxyl groups in the acrylpolyol resin. These hydroxyl groups are dangling from acrylpolyol main chain, and they can easily react with melamine or other hardening agents such as polyisocyanate, to form crosslinking. This results in elastic and tough coating films.



### <Composition / Information on Ingredients>

Composition of PLACCEL FA1DDM (Weight %)

| Component Name & Chemical Name                         | Concentration in PLACCEL FA1DDM | Unit (g/g) |
|--|---------------------------------|------------|
| Hydroxyalkyl acrylate (modified hydroxyalkyl acrylate) | 77-83%                          | 10000      |
| ε-caprolactone   | 13-17%                          | 10000      |
| Hydroxyalkyl acrylate                                  | 77-83%                          | 10000      |

### Physical Properties

| Property                 | Value            |
|--------------------------|------------------|
| Appearance               | Colorless liquid |
| Boiling Point            | 140-145°C        |
| Freezing Point           | -10°C            |
| Flash Point              | 25°C             |
| Autoignition Temperature | 200°C            |
| Relative Density (20°C)  | 1.05             |
| Refractive Index (20°C)  | 1.45             |
| Viscosity (20°C)         | 0.5-1.0 Pa·s     |

### Chemical Properties

| Property            | Value   |
|---------------------|---------|
| Acrylic Double Bond | 0.8-0.9 |
| Hydroxyl Group      | 0.1-0.2 |
| Caprolactone Ring   | 0.1-0.2 |
| Acrylic Double Bond | 0.8-0.9 |
| Hydroxyl Group      | 0.1-0.2 |
| Caprolactone Ring   | 0.1-0.2 |

These values are based on the average values of the products. The actual values may vary depending on the production lot and the measurement method. Please refer to the actual data of each product and production lot.

Please refer to our SDS (Safety Data Sheet) for information on the handling of each product.

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