

# EPOXOL® EMS

## Epoxidized Methyl Soyate

### Description

Epoxol® EMS is a zero VOC functional modifier, reactive diluent, acid scavenger, chemical intermediate, and plasticizer. It exhibits high solvency strength, excellent viscosity reduction and plasticization properties. Epoxol® EMS is compatible with epoxies, polyurethanes, acrylics, alkyds, and a variety of other resins. It has epoxide functionality, very low color and odor, is non-yellowing, very hydrophobic, and does not contain halogens. Applications include Coatings, Sealants, Adhesives, Elastomers, Electronic Applications, Degreasers, PVC, and Lubricants. The high bio-derived content makes EPOXOL® EMS an excellent choice for renewable formulations.

### Physical Properties, Typical<sup>1</sup>

| Property                      | Value       | Method                    |
|-------------------------------|-------------|---------------------------|
| Oxirane Oxygen %:             | 6.8         | ASTM D1652                |
| Density@25°C, g/L             | 0.96 ± 0.05 | ASTM D4052                |
| Appearance                    | <50         | Visual / Pt-Co ASTM D1209 |
| Viscosity @ 25° C, cps        | <30         | ASTM D2196-10             |
| Moisture, %                   | <0.20       | ASTM E1064                |
| VOC <sup>2</sup> , %          | 0           | ASTM D6886-14             |
| Active matter, %              | >99.5       | Calculated                |
| Flash point, °C               | >190        | ASTM D93                  |
| Bio-based material content, % | 95          | ASTM D-6866-12/Method B   |

### Usage Recommendations

- As a Bio-Based alternative to conventional plasticizers.
- A modifier, reactive diluent and chemical intermediate.
- Use in Coatings, Adhesives, Sealants, Elastomers, Cleaners, PVC, Rubber, and Degreasers.
- Zero VOC viscosity reducer.

### Storage and Handling

- Please consult the product SDS before using or storing this product. Store in the original unopened container. If the container is opened use entire contents as soon as possible. Reseal container tightly.
- Product should be stored at temperatures between 10°C/50°F and 50°C/122°F.
- If product becomes cloudy and/or crystallizes due to freezing or exposure to low temperatures, it is totally reversible without any loss of properties. Reconstitute the product before use in accordance with document "EPOXOL® EMS Procedure to Reconstitute Crystallized Product" located on company website [www.acstech.com](http://www.acstech.com). Vent container while warming.
- Shelf life is a minimum of 36 months when stored as recommended in the original unopened container.

<sup>1</sup>These are typical properties and are not to be construed as sales specifications. Please contact ACS for additional information.

<sup>2</sup>VOC = Volatile Organic Compound. Based on independent lab testing of latex paint using ASTM D6886 used as recommended at up to 10 weight percent based on total paint formulation.

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## EPOXOL® EMS

### Inventory Information

| <u>Registry</u> | <u>Status</u> | <u>Country</u> |
|-----------------|---------------|----------------|
| TSCA            | Listed        | United States  |
| IECSC           | Listed        | China          |
| DSL             | Listed        | Canada         |
| EINECS          | Listed        | Europe         |
| ECL             | Listed        | Korea          |
| NZIoC           | Listed        | New Zealand    |



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