# Cardolite<sup>®</sup> LITE 2020 Multipurpose Resin Modifier Technical Datasheet

#### **DESCRIPTION**

Cardolite LITE 2020 is a low viscosity multipurpose resin modifier designed for use in coatings, adhesives, and other applications. The long hydrophobic aliphatic side chain of the cardanol molecule gives this product a very low viscosity and provides excellent early water resistance and corrosion protection. Used as an epoxy diluent, LITE 2020 enables high solids or solvent free formulations with enhanced workability without sacrificing other performance properties. This product also has the ability to react and be used in alkyds, urethanes, and acrylics.

$$\begin{array}{c} {\rm O-CH_2-CH_2-OH} \\ \hline \\ {\rm C_7H_{44}CH=CH-CH_2-CH=CH-C_3H_7} \end{array}$$

**CHEMICAL STRUCTURE** 

#### **PROPERTIES**

| PROPERTY               | SPECIFICATION | TEST METHOD   |
|------------------------|---------------|---------------|
| Color (Gardner)        | ≤ 14          | ASTM D1544    |
| Viscosity @ 25°C (cPs) | 30 - 115      | ASTM D2196    |
| рН                     | 6.7 - 9.7     | ASTM E70      |
| Solids (% weight)      | ≥ 97          | ASTM D2369-98 |
| Free Cardanol (%)      | ≤ 2.5         |               |

| Property  | TYPICAL VALUE       | Test Method   |
|---|---------------------|---------------|
| Appearance                                      | Orange brown liquid | Visual        |
| Hydroxyl Value                                  | 170                 | ASTM D1957    |
| Iodine Number                                   | 188                 | ASTM D2075-92 |
| Density @ 25°C (kg/L) (lbs/gal)                 | 0.963<br>8.03       | ASTM D1475    |
| Flash point                                     | > 118°C / 244°F     | ASTM D93      |
| Recommended Use Level (% of total resin weight) | ≤ 20                | -             |
| Shelf Life (Months)                             | 24                  | -             |

Typical properties are not to be construed as specifications

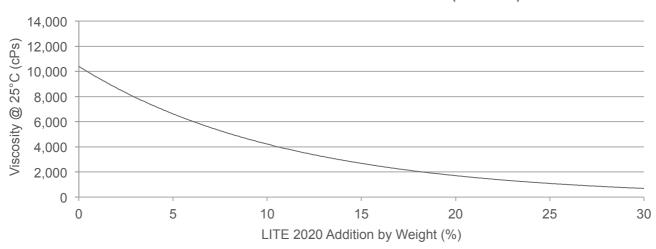
## **APPLICATIONS**

Cardolite LITE 2020 was designed as a formulation tool to reduce VOC levels and viscosity on coating systems used in heavy duty marine, protective, industrial, and floor coatings. Although higher in viscosity than some other modifiers, the structure of this product gives excellent dilution efficiency to help rapidly reduce viscosity for improved pigment wetting, flexibility, and general application properties. Coating physical properties such as water resistance, corrosion protection, color stability, chemical resistance, and gloss are not significantly compromised with the addition of LITE 2020, and the product can be added in in either component of multi-part formulations.

# **ADVANTAGES**

- Lowers viscosity while maintaining performance
- Preserves chemical and water resistance
- · Good dilution effect
- · Adds flexibility
- Reduces high shear
- · Compatible and usable in a variety of coating chemistries
- · Improves pigment wetting
- Reacts with urethanes, alkyds, and acrylic resin
- · Low volatility and high flash point
- Non-toxic
- Based from natural, renewable, non-food raw material feedstock

# LITE 2020 DILUTION CURVE WITH LIQUID EPOXY RESIN (EEW=190)



#### **REGULATORY STATUS**

Please refer to the material safety data sheet (MSDS). Specific information regarding chemical inventory listing can be obtained from your local sales representative.

# **SAFETY PRECAUTIONS**

Please refer to the material safety data sheet (MSDS). Copies of the MSDS can be requested on the Cardolite website or via your local sales representative.

#### STABILITY AND STORAGE

Cardolite products may absorb moisture and carbon dioxide when left in open containers, which could result in increased viscosity, discoloration, reduction of reactivity, and/or crystallization of the products. These products should be kept tightly sealed in their original containers when not in use, and stored in a cool, dry place.

### **CONTACT INFORMATION**



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Cardolite Technical Datasheet

LITE 2020

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