

# Cardolite® NC-558

## Epoxy Curing Agent

### Technical Datasheet

#### DESCRIPTION

Cardolite® NC-558 is a unique type of epoxy resin hardener known as a phenalkamine. This very low viscosity curing agent allows the formulation of solvent free epoxy coatings for concrete primers. The distinctive structure of phenalkamines imparts a unique combination of desirable properties to the curing agents and the coatings derived from them. Phenalkamines exhibit rapid cure, even at low temperatures with a workable pot-life and have the ability to resist moisture while curing, making them ideal for all season cure surface tolerant coatings. Cardolite® NC-558 has been accepted for use in coatings for potable water contact in several countries.

#### TYPICAL PROPERTIES

|  | TYPICAL VALUE        | SPECIFICATION |
|--|----------------------|---------------|
| Viscosity @ 25°C (cPs)                           | 900                  | 500-1500      |
| Amine Value (mg KOH/g)                           | -                    | 320-360       |
| Active Hydrogen equivalent (AHEW)                | 95                   | -             |
| Flash point (closed cup)                         | >104°C/220°F         | -             |
| Density @ 25°C lbs/gal (kg/l)                    | 8.24 (0.98)          | -             |
| Appearance                                       | Amber colored liquid |               |
| Color (Gardner)                                  | 17                   | 17 max        |
| Volatile Loss (%)                                | -                    | 4.5 max.      |
| Recommended PHR<br>(liquid epoxy resin, EEW=190) | 50-65                | -             |

#### APPLICATIONS

Solvent free and high solids epoxy coatings and primers for flooring and pipe applications under cold and damp conditions. Suitable for coatings in contact with potable water.

#### ADVANTAGES

- Excellent combination of rapid cure and long pot-life at both ambient and low (<40°F) temperatures
- Non critical mix ratio
- Good adhesion to wet and dry substrates
- Moisture tolerant during cure
- Outstanding chemical resistance
- Compatible with most resins and solvents
- Applications for contact with potable water
- Solvent free
- Ship DOT non corrosive
- Based from natural renewable raw material feedstock

## CURE PROPERTIES

| FORMULATION  | A                          |
|--|----------------------------|
| Liquid Epoxy Resin (EEW 190) (pbw)                 | 100                        |
| Cardolite <sup>®</sup> NC-558                      | 50                         |
| Gel time, 100 g @ 25°C (min)                       | 40                         |
| Thin film set times, 8 mils (200micron)            |                            |
| @ 75°F (24°C) (hrs)                                | 12                         |
| @ 42°F (5°C) (hrs)                                 | 38                         |
| Cure rate / Film appearance @ 42°F (5°C) & 100% RH | Not affected / Slight haze |

## APPROVALS AND REGULATORY STATUS

TSCA, EINICS, NICNAS AICS

## SAFETY PRECAUTIONS

Please refer to the material safety data sheet (MSDS).

## STORAGE & STABILITY

Cardolite<sup>®</sup> Epoxy curing agents will absorb moisture and carbon dioxide when left in open containers. This may result in increased viscosity and some crystallization of the products. Therefore, all containers of these products should be kept tightly closed when not in use and stored inside in a cool, dry place. Properly protected from moisture and air, this product has a shelf life of 6 months.

## CONTACT INFORMATION



**Cardolite**

The World Quality Leader in Cashew Liquid Technology

Cardolite Corporation  
500 Doremus Avenue  
Newark, NJ 07105  
United States of America

T: +1-973-344-5015  
F: +1-973-344-1197  
<http://www.cardolite.com>

Cardolite Europe N.V.  
Offerlaan 116-118  
B 9000 Gent  
Belgium

T: +32-(9)-265-8820  
F: +32-(9)-265-8829

Cardolite Chemical Zhuhai Ltd.  
Biyang Road  
Harbor Industrial Zone  
Zhuhai, Guangdong 519050  
P.R. China

T: +86-756-726-9066  
F: +86-756-726-9067

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