

Technical Data Sheet

EPIKURE™ Curing Agent 3090

Product Description

EPIKURE™ Curing Agent 3090 is a moderate-viscosity, modified amidoamine adduct that is blush-resistant and features a 1-to-1 by weight/mix/ratio with standard liquid epoxy resins. Suitable curing at or below room temperature can be achieved. Good adhesion to damp or underwater substrates, including including concrete and steel, is possible.

Application Areas/Suggested Uses

- Old to new concrete primers
- Patching compound for concrete containing damp or rusted steel
- Marine coatings which cure underwater or on damp substrates
- Mortars and grouts which cure at low temperatures
- Blush-resistant adhesives for metals and many plastics
- High-solids concrete primers with excellent penetration

Benefits

- High corrosion resistance
- Good blush- and water-resistant
- Strong adhesion to cool or damp substrates
- One-to-one mix ratio by weight
- Positive low-temperature, thin-film cures
- High solids

Sales Specifications

| Property | Value | Unit | Test Method |
|-------------------|-------------|---------|-------------|
| Amine Value | 230 - 260 | g/eq | ASTM D2896 |
| Color | 10 max | Gardner | ASTM D1544 |
| Viscosity at 25°C | 3000 - 6000 | cP | ASTM D2196 |

Typical Properties

EPIKURE Curing Agent 3090
<https://www.hexion.com/en-US/product/epikure-curing-agent-3090>

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| Property | Value | Unit | Test Method |
|---------------------------|---------|---------|-------------|
| Equivalent Weight Approx. | 190 | | |
| Pounds/Gallon @ 25°C | 8.2 | lbs/gal | ASTM D1475 |
| Solids | 90 | % | |
| Solvent | 40 - 60 | eq/100g | |

Performance Properties

Table 1 / Epoxy Systems Cured with EPIKURE Curing Agent 3090

| | Method | Units | A | B | C | D |
|----------------------------------|------------|-------|--------|-------|-------|-------|
| EPOX™ Resin 828 | | pbw | 100 | | | |
| EPON Resin 813 | | pbw | | 100 | | |
| EPON Resin 815 | | pbw | | | 100 | |
| EPON Resin 8132 | | pbw | | | | 100 |
| EPIKURE Curing Agent 3090 | | pbw | 101 | 102 | 103 | 95 |
| Handling Properties @ 25°C | | | | | | |
| Resin Viscosity | ASTM D2196 | cP | 13,000 | 600 | 600 | 600 |
| Mixed system Viscosity | ASTM D2196 | cP | 5,100 | 1,775 | 1,790 | 1,670 |
| Gel time, 100 gram mass | | min. | 111 | 171 | 173 | 192 |
| Chemical Resistance ¹ | | | | | | |
| Water | | | | | | |

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| | Method | Units | A | B | C | D |
|------------------------------|--------|-------|-------|-------|-------|-------|
| 24 hours | | % | 0.24 | 0.25 | 0.32 | 0.26 |
| 7 days | | % | 0.71 | 0.68 | 0.82 | 0.69 |
| 5% acetic acid | | | | | | |
| 24 hours | | % | 6.19 | 9.34 | 9.56 | 8.44 |
| 7 days | | % | 17.74 | 27.70 | 27.84 | 23.73 |
| 50% xylene / 50% isopropanol | | | | | | |
| 24 hours | | | 2 | 2 | 2 | 2 |
| | | | | | | |

¹ Percent weight gain of 76mm x 6.4m specimens after immersion at 25°C.

² Disintegrated

General Information

Proprietary modified polyamidoamine adduct, 90% solids in ethanol.

Safety, Storage & Handling

Please refer to the MSDS for the most current Safety and Handling information.

Please refer to the Hexion web site for Shelf Life and recommended Storage information.

EPIKURE Curing Agent 3090 should be kept in tightly closed containers in a cool, dry place. As with most amine based curing agents, this product will absorb moisture and carbon dioxide which may affect viscosity or create foaming when reacted with epoxy resins. Although stable at room temperature in an unopened container, this material will become darker in color with exposure to the atmosphere.

Exposure to these materials should be minimized and avoided, if feasible, through the observance of proper precautions, use of appropriate engineering controls and proper personal protective clothing and equipment, and adherence to proper handling procedures. None of these materials should be used, stored, or transported until the handling precautions and recommendations as stated in the Material Safety Data Sheet (MSDS) for these and all other products being used are understood by all persons who will work with them. Questions and requests for information on Hexion Inc. ("Hexion") products should be directed to your Hexion sales representative, or the nearest Hexion sales office. Information and MSDSs on non-Hexion products should be obtained from the respective manufacturer.

Packaging

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Available in bulk and drum quantities.

Contact Information

For product prices, availability, or order placement, please contact customer service:

www.hexion.com/Contacts/

For literature and technical assistance, visit our website at: www.hexion.com

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