

**ANCAMINE® 2143** Curing Agent**DESCRIPTION**

Ancamine 2143 curing agent is a modified cycloaliphatic amine adduct intended for use at ambient temperatures with liquid epoxy resins. The cycloaliphatic base amine in Ancamine 2143 is proprietary Evonik technology specifically designed to aid formulation of user-friendly solvent free coatings and self-levelling flooring.

**ADVANTAGES**

- Good through cure properties exhibited down to 10°C
- Improved chemical and abrasion resistance compared to standard cycloaliphatic amine curing agents
- Excellent resistance to amine blush and water-spotting
- Low initial colour and excellent long term colour stability
- Low viscosity
- High gloss coatings

**APPLICATIONS**

- Decorative and performance self-levelling and screed flooring
- Solvent free and high solids, high performance coatings
- Tile grouts
- Chemically resistant tank linings and grouts

**SHELF LIFE**

At least 24 months from the date of manufacture in the original sealed container keep at ambient temperature.

**STORAGE AND HANDLING**

Refer to the Safety Data Sheet for Ancamine 2143 curing agent.

**TYPICAL PROPERTIES**

<b>Appearance</b>	Clear light yellow liquid
<b>Colour<sup>1</sup> (Gardner)</b>	<2
<b>Viscosity<sup>2</sup> @ 25°C [mPa.s]</b>	500-700
<b>Amine Value<sup>3</sup> [mg KOH/g]</b>	250-260
<b>Specific Gravity @ 25°C, [g/ml]</b>	1.04
<b>Equivalent Wt/{H}</b>	115
<b>Recommended use Level<sup>4</sup> [PHR]</b>	60

**TYPICAL HANDLING PROPERTIES<sup>4</sup>**

<b>Mixed Viscosity<sup>2</sup> at 25°C, [mPa.s]</b>	2,400
<b>Gel Time<sup>5</sup> (150g mix at 25°C), [mins]</b>	45
<b>Peak Exotherm<sup>6</sup> (150g mix at 25°C), [°C]</b>	102
<b>Time to peak exotherm<sup>6</sup>, [mins]</b>	58
<b>Thin Film Set Time<sup>7</sup> 25°C, [h]</b>	7.0
<b>Shore D<sup>8</sup> 20°C, (24 h)</b>	83
<b>Typical cure schedule 2- 7 days</b>	

**TYPICAL PERFORMANCE PROPERTIES<sup>15</sup>**

<b>Compressive Strength<sup>9</sup>, [MPa]</b>	72
<b>Tensile Strength<sup>10</sup>, [MPa]</b>	52
<b>Tensile Modulus<sup>10</sup>, [GPa]</b>	3.0
<b>Tensile Elongation<sup>10</sup>, [%]</b>	2.8
<b>Flexural Strength<sup>11</sup>, [MPa]</b>	77
<b>Flexural Modulus<sup>11</sup>, [GPa]</b>	2.6
<b>Heat Distortion Temperature<sup>12</sup>, [°C]</b>	46
<b>Abrasion Resistance<sup>13</sup> (1000 cycles), [mg wgt loss]</b>	34
<b>Carbamation Test<sup>14</sup></b>	5

## Footnotes:

- |   |  |
|---|--|
| (1) ASTM D 1544-80                              | (8) DIN 53505  |
| (2) Brookfield RVTD, Spindle 4                  | (9) ISO 604  |
| (3) Perchloric Acid Titration                   | (10) ISO 527   |
| (4) With Bisphenol A diglycidyl ether (EEW=190) | (11) ISO 178   |
| (5) Techne GT-3 Gelation Timer                  | (12) ASTM D648   |
| (6) ASTM D 2471-71                              | (13) ASTM D 4060-90  |
| (7) BK Drying Recorder Phase III                | (14) Scale 1-5 (5 is best)   |
|   | (15) With Bisphenol A diglycidyl ether diluted with 10% Epodil 748 |

Epoxy Curing Agents and Modifiers

# ANCAMINE® 2143 Curing Agent

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