

**ANCAMINE® 2014AS AND 2014FG Curing Agents****DESCRIPTION**

Ancamine 2014AS and Ancamine 2014FG are modified aliphatic polyamine adducts designed for use as a latent catalyst and curing agent for liquid epoxy resins. They can also be used as accelerators for dicyandiamide (DICY). Ancamine 2014FG is a finer particle size version of Ancamine 2014AS. Compared to Ancamine 2014AS, Ancamine 2014FG exhibits greater reactivity at moderate cure temperatures (80-100°C) coupled with improved adhesive strength both in the presence and absence of dicyandiamide. Ancamine 2014AS provides outstanding latency and rapid cure above its activation temperature and excellent adhesion to metals and plastics.

**ADVANTAGES**

Ancamine 2014AS is an excellent accelerator/synergist for latent amine curing agent catalyst combinations including dicyandiamide, imidazoles, uron co-catalysed dicyandiamide and imidazole co-catalysed dicyandiamide. It is provided in finely pulverised powder form to facilitate dispersion in liquid epoxy resin by simple hand mixing. The latency characteristic — moderate temperature reactivity and early development of adhesive strength during cure — make Ancamine 2014FG an excellent curing agent or accelerator for dicyandiamide in adhesive applications where high temperature heat cures are not possible.

**APPLICATIONS**

- One-component adhesives
- Solvent free laminating
- Potential application areas for Ancamine 2014FG include metal-to-metal, plastic-to-metal, plastic-to-plastic bonding and solvent-free laminating application.

**SHELF LIFE**

At least 24 months from date of manufacture in original sealed container stored undercover at ambient temperature away from excessive heat and humidity.

**STORAGE AND HANDLING**

Refer to the Safety Data Sheet for Ancamine 2014AS and Ancamine 2014FG curing agent.

**TYPICAL PROPERTIES**

<b>Appearance</b>	White Micronized Powder
<b>Amine Value</b>	180-190
<b>Free Water, %</b>	max 0.5%
<b>Specific Gravity @ 25°C</b>	0.23
<b>Melting size, microns</b>	
<b>2014AS</b>	90% ≤36
<b>2014FG</b>	90% <6
<b>Recommended Use Level phr (EEW=190)</b>	25-30

**CATALYTIC USAGE**

**3-7 phr with resin EEW 190 with 4-8 phr dicyandiamide**

**2-3 phr phr with resin EEW 190 with 4-8 phr dicyandiamide and 3-5 phr uron or imidazole**

**TYPICAL HANDLING PROPERTIES (AT 28 PHR)**

<b>Gel time (1g mix at 77°C), mins</b>	25
<b>Pot life (150 mix @ 40°C), mths</b>	112
<b>DSC activation temperature, °C</b>	75

**TYPICAL PERFORMANCE PROPERTIES**

<b>Glass Transition Temperature, °C</b>	75
<b>Lap Shear Strength, N/mm<sup>2</sup></b>	
<b>2014FG (at 28 phr)</b>	
<b>30 mins at 80°C</b>	3.7
<b>30 mins at 100°C</b>	6.1
<b>30 mins at 120°C</b>	7.4
<b>30 mins at 140°C</b>	10.3
<b>Weight gain after 3 h in boiling water, %</b>	1.0

Epoxy Curing Agents and Modifiers

# ANCAMINE® 2014AS AND 2014FG Curing Agents

**EVONIK RESOURCE EFFICIENCY GMBH**

Business Line Crosslinkers  
Paul-Baumann-Straße 1  
45764 Marl  
Germany

[apcsepx@evonik.com](mailto:apcsepx@evonik.com)  
[www.evonik.com/crosslinkers](http://www.evonik.com/crosslinkers)

This information and any recommendations, technical or otherwise, are presented in good faith and believed to be correct as of the date prepared. Recipients of this information and recommendations must make their own determination as to its suitability for their purposes. In no event shall Evonik assume liability for damages or losses of any kind or nature that result from the use of or reliance upon this information and recommendations. EVONIK EXPRESSLY DISCLAIMS ANY REPRESENTATIONS AND WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, AS TO THE ACCURACY, COMPLETENESS, NON-INFRINGEMENT, MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE (EVEN IF EVONIK IS AWARE OF SUCH PURPOSE) WITH RESPECT TO ANY INFORMATION AND RECOMMENDATIONS PROVIDED. Reference to any trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used. Evonik reserves the right to make any changes to the information and/or recommendations at any time, without prior or subsequent notice.

