

Product information

AMICURE[®] IC-20

Curing Agent for Polyisocyanate Resin

DESCRIPTION

Amicure IC-20 is an amine curing agent specifically designed to cure with standard HDI Trimer or Biuret Isocyanates.

When formulated, Amicure IC-20 based clear and pigmented coatings exhibit very rapid property development, high aesthetics and are suitable for exterior applications. We recommend the use of a high solids or waterborne epoxy primer especially under damp conditions. Working & dry times are significantly accelerated under high humidity and temperature.

TYPICAL PROPERTIES

Property	Value	Unit	Method
Colour	< 2	Gardner	
Amine Equivalent Weight	276-282	AEW	
Specific Gravity	1.06		
Viscosity @ 25°C	500-1500	cPs	

ADVANTAGES

- Rapid hardness development #
- Low color and excellent UV durability #
- Low temperature cure

APPLICATIONS

- Industrial Coatings
- Floor Coatings

STORAGE AND HANDLING

At least 18 months from the date of manufacture in the original sealed container at ambient temperature. Store away from excessive heat and humidity and avoid contact with moisture. Recommended storage temperature is 0-40°C.

HANDLING PRECAUTIONS

Refer to the Safety Data Sheet for Amicure IC-20 curing Agent.

TYPICAL HANDLING PROPERTIES

Property	Value	Unit	Method
Isocyanate Resin	HDI Trimer		HDI Trimer = 21.8 wt% NCO, 2500 cPs @ 25°C
Mix Ratio	1.3 to 1.4		curing agent to Isocyanate by weight
Use Level	130 - 140	phr	
Mix Viscosity @ 25°C	2000 - 3000	cPs	
Viscosity build	10 - 20	min	time to 12,000 cPs

DRY FILM TIMES (10MIL THICKNESS, 22°C 50% RH)

Property	Value	Unit	Method
Dry time, set to touch	5-15	min	
Dry time, tack free time	20-30	min	
Dry time, through cure	~1	h	

HARDNESS DEVELOPMENT (22 °C 50% RH)

Property	Value	Unit	Method
Shore D – 4 h	65		
Shore D – 6 h	77		
Shore D – 24 h	84		
Shore D Hardness, 12hrs @ 0°C	62		

TYPICAL FINAL PROPERTIES

Property	Value	Unit	Method
UV Resistance	3.8	ΔE	QUV-A, 500hrs
Tensile Strength	7500	psi	
Elongation @ Break	3	%	
Abrasion Resistance	48	mg loss	1000 cycles, 1kg, CS17 Wheel
Gardner Impact Resistance	40 / 40		Direct / Reverse

Amicure® is a registered trademark of Evonik Industries AG or one of its subsidiaries.

Disclaimer

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.

EVONIK OPERATIONS GMBH

Business Line Crosslinkers
Paul-Baumann-Str. 1
45764 Marl
Germany

www.evonik.com/crosslinkers

Product Information: APCSE@evonik.com

Sample Request: APCSE@evonik.com

EVONIK CORPORATION

Business Line Crosslinkers
7201 Hamilton Blvd.
Allentown, PA 18195
USA

CrosslinkersProinfo@evonik.com

Crosslinkers-Samples@evonik.com

EVONIK SPECIALTY CHEMICALS (SHANGHAI) CO., LTD.

Business Line Crosslinkers
55, Chungong Road
Xinzhuang Industry Park
Shanghai, 201108
China

CL-Asiainfo@evonik.com

CL-Asiainfo@evonik.com

