

AMICURE[®] IC-40

Curing Agent for Polyisocyanate Resin

DESCRIPTION

Amicure IC-40 curing agent based clear and pigmented coatings exhibit rapid property development, high aesthetics and can be formulated for exterior application. The use of an epoxy primer is recommended, especially under damp conditions. Working times and dry times are significantly accelerated under high humidity and temperature. The product can be cured with HDI trimer and biuret type isocyanates.

TYPICAL PROPERTIES

Property	Value	Unit	Method
Appearance	Light yellow liquid		
Colour	≤ 2	Gardner	ASTM D 1544
Viscosity @ 25°C	500-1500	mPa s	Brookfield RVTD, spindle 4
Water Content	≤ 0.015	wt %	Karl Fisher Method
Specific Gravity @ 21 °C	1.06		
Equivalent	288-294	Wt/{H}	
Recommended Use Level *	135-145	PHR	

ADVANTAGES

- Long Pot life
- Low color and excellent UV durability
- Excellent surface appearance
- Zero VOC

APPLICATIONS

- Industrial Coatings
- Floor Coatings

SHELF LIFE

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.

STORAGE AND HANDLING

Refer to the Safety Data Sheet for Amicure IC-40 curing Agent.

TYPICAL HANDLING PROPERTIES * (25°C, 50% RH)

Property	Value	Unit	Method
Mix Viscosity	2000-3000	mPa.s	Brookfield RVTD, spindle 4
Working Pot Life	3-4	h	Time to viscosity build of 12 Pa.s
Thin Film Set Time	11	h	ASTM D 5895 - BK Drying Recorder, Phase 3
Persoz Hardness after 1 / 7 days	210/270	s	ISO 1522
Shore D Hardness ⁸ after 1 / 7 days	25/84	s	DIN 53505, 3 mm thick casting
Typical cure schedule	2-7	days	

TYPICAL PERFORMANCE PROPERTIES *

Property	Value	Unit	Method
UV-A Resistance after 500 h	3.5	ΔE	ASTM G154-06
Impact Resistance Direct/Reverse	40/40	kg.cm	ISO 6272
Abrasion Resistance CS17, 1000 cycli	40	mg loss	ISO 7784; CS17 wheels, 1000 cycles
Tensile Strength	34	MPa	ISO 527
Tensile Elongation at Break	3	%	ISO 527

* with HDI Trimer, 21.8 wt% NCO, 2500 mPa.s at 25°C

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

Disclaimer

This information and all further technical advice are based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

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
7001 Hamilton Boulevard
Trexlerstown, PA 18087
USA

CrosslinkersProinfo@evonik.com

Crosslinkers-Samples@evonik.com

**EVONIK SPECIALTY CHEMICALS
(SHANGHAI) CO., LTD.**

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

CL-Asiainfo@evonik.com

CL-Asiainfo@evonik.com

