

## Product information

# AMICURE<sup>®</sup> IC-221

## Curing Agent for Polyisocyanate Resin

### DESCRIPTION

Amicure IC-221 is an amine curing agent specifically designed for polyisocyanate resins. Preferred resins of choice are standard and low viscosity HDI trimer isocyanates for a range of industrial applications. Clear and pigmented topcoats based on Amicure IC-221 support high aesthetics, UV stability and rapid property development for fast return to service. Amicure IC-221 curing agent is free of solvents, alkyl phenol derivatives and benzyl alcohol.

Coatings and floorings based on Amicure IC-221 curing agent are recommended to be used in combination with an epoxy primer, especially under damp conditions. Working and drying times are accelerated under high humidity conditions.

### TYPICAL PROPERTIES

Property	Value	Unit	Method
Appearance	Light yellow liquid		
Colour	≤ 215	APHA	ASTM D 1544
Viscosity @ 25°C	100-800	mPa s	Brookfield RVTD, spindle 4
Water Content	≤ 0.015	wt %	Karl Fisher Method
Specific Gravity @ 21 °C	1.06		
Equivalent	376	Wt/{H}	
Recommended Use Level *	185	PHR	

### ADVANTAGES

- Fast cure speed
- Excellent aesthetics and UV durability
- Low mix viscosity for improved handling
- Low odor

### APPLICATIONS

- Topcoats and Sealers

### SHELF LIFE

At least 12 months from the date of manufacture in the original sealed container at ambient temperature. Store away from excessive heat and humidity in tightly closed containers.

## STORAGE AND HANDLING

Refer to the Safety Data Sheet for Amicure IC-221 curing Agent.

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

Property	Value	Unit	Method
Mix Viscosity	1000-1500	mPa.s	Brookfield RVTD, spindle 4
Working Pot Life	20-25	min	Time to viscosity build of 12 Pa.s at 25°C
Thin Film Set Time	45	h	ASTM D 5895 - BK Drying Recorder, Phase 3
PersoZ Hardness after 1 / 7 days	200/210	s	
Shore D Hardness 8 / 16 / 24 h	50 / 73 / 75		
Typical cure schedule	2-7	days	

### TYPICAL HANDLING PROPERTIES \* (5°C, 50% RH)

Property	Value	Unit	Method
Thin Film Set Time	75	min	ASTM D 5895 - BK Drying Recorder, Phase 3
PersoZ Hardness after 1 / 7 days	145/205	s	
Shore D Hardness after 8 / 16 / 24 h	30 / 70 / 72		

### TYPICAL PERFORMANCE PROPERTIES \*

Property	Value	Unit	Method
UV-A Resistance after 500 h	< 5	ΔE	
Impact Resistance	> 200	kg.cm	
Abrasion Resistance CS17, 1000 cycli	40	mg loss	
Compressive Strength	32	MPa	
Tensile Strength	32	MPa	
Tensile Elongation at Break	10	%	
Glass Transition Temperature	48	°C	Differential Scanning Calorimetry (DSC)
Carbamation Resistance	5	Scale 1-5, 5=best	ISO 2812 (wet patch method)

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

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**EVONIK OPERATIONS GMBH**

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

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

**Product Information:** [APCSE@evonik.com](mailto:APCSE@evonik.com)

**Sample Request:** [APCSE@evonik.com](mailto:APCSE@evonik.com)

**EVONIK CORPORATION**

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

[CrosslinkersProinfo@evonik.com](mailto:CrosslinkersProinfo@evonik.com)

[Crosslinkers-Samples@evonik.com](mailto: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](mailto:CL-Asiainfo@evonik.com)

[CL-Asiainfo@evonik.com](mailto:CL-Asiainfo@evonik.com)

