

**AMICURE® IC-20** Curing Agent for Polyisocyanate Resin**DESCRIPTION**

Amicure IC-20 curing agent based clear and pigmented coatings exhibit very 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.

**ADVANTAGES**

- Rapid hardness development
- Low color and excellent UV durability
- Low mix temperature cure
- 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-20 curing agent.

**TABLE 1: TYPICAL PROPERTIES**

<b>Appearance</b>	Light yellow liquid
<b>Colour<sup>1</sup> (Gardner)</b>	≤2
<b>Viscosity<sup>2</sup> @ 25°C (mPa.s)</b>	500-1500
<b>Water Content<sup>3</sup> (wt %)</b>	≤0.015
<b>Specific Gravity @ 21°C</b>	1.06
<b>Equivalent Wt/{H}</b>	276-282
<b>Recommended Use Level<sup>4</sup> (PHR)</b>	130-140

**TABLE 2: TYPICAL HANDLING PROPERTIES<sup>4</sup>  
25°C, 50% RH**

<b>Mix Viscosity<sup>2</sup> (mPa.s)</b>	2000-3000
<b>Working Pot Life<sup>5</sup> (min)</b>	10-20
<b>Thin Film Set Time<sup>6</sup> (h)</b>	25
<b>Persoz Hardness<sup>7</sup> after 4 / 6 / 24 h (s)</b>	275 / 290 / 290
<b>Shore D Hardness<sup>8</sup> after 4 / 6 / 24 hs</b>	65 / 77 / 84
<b>Typical cure schedule</b>	1-2 days

**TABLE 3: TYPICAL PERFORMANCE PROPERTIES<sup>4</sup>**

<b>UV-A Resistance<sup>9</sup> after 500 h (ΔE)</b>	<5
<b>Impact Resistance<sup>10</sup> Direct/Reverse (kg.cm)</b>	40/40
<b>Abrasion Resistance<sup>11</sup> (mg loss)</b>	48
<b>Tensile Strength<sup>12</sup> (MPa)</b>	52
<b>Tensile Elongation at Break<sup>12</sup> (%)</b>	3

- (1) ASTM D 1544
- (2) Brookfield RVTD, spindle 4
- (3) Karl Fisher Method
- (4) With HDI Trimer, 21.8 wt% NCO, 2500 mPa.s at 25°C
- (5) Time to viscosity build of 12 Pa.s
- (6) ASTM D 5895 - BK Drying Recorder, Phase 3
- (7) ISO 1522
- (8) DIN 53505, 3 mm thick casting
- (9) ASTM G154-06
- (10) ISO 6272
- (11) ISO 7784; CS17 wheels, 1000 cycles
- (12) ISO 527

Epoxy Curing Agents and Modifiers

# AMICURE® IC-20 Curing Agent for Polyisocyanate Resin

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