

Product information

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.

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 | 276-282 | Wt/{H} | |
| Recommended Use Level* | 130-140 | PHR | |

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.

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

| Property | Value | Unit | Method |
|-------------------------------------|-----------------|-------|---|
| Mix Viscosity | 2000-3000 | mPa.s | Brookfield RVTD, spindle 4 |
| Working Pot Life | 10-20 | min | Time to viscosity build of 12 Pa.s |
| Thin Film Set Time | 25 | h | ASTM D 5895 - BK Drying Recorder, Phase 3 |
| PersoZ Hardness after 4 / 6 / 24 h | 275 / 290 / 290 | s | ISO 1522 |
| Shore D Hardness after 4 / 6 / 24 h | 65 / 77 / 84 | s | DIN 53505, 3 mm thick casting |
| Typical cure schedule | 1-2 | days | |

TYPICAL PERFORMANCE PROPERTIES *

| Property | Value | Unit | Method |
|----------------------------------|-------|---------|------------------------------------|
| UV-A Resistance after 500 h | < 5 | ΔE | ASTM G154-06 |
| Impact Resistance Direct/Reverse | 40/40 | kg.cm | ISO 6272 |
| Abrasion Resistance | 48 | mg loss | ISO 7784; CS17 wheels, 1000 cycles |
| Tensile Strength | 52 | MPa | ISO 527 |
| Tensile Elongation at Break | 3 | % | ISO 527 |

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

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