

AMICURE[®] IC-186

Curing Agent

DESCRIPTION

Amicure[®] IC-186 is designed to cure with standard HDI Trimer. When formulated, Amicure[®] IC-186-based clear and pigmented coatings exhibit rapid property development. The unique feature of this product is its best in class potlife compared to typical polyaspartics. The coatings based on Amicure[®] IC-186 resins can be spray applied using conventional and airless spray.

TYPICAL PROPERTIES

Property	Value	Unit	Method
Appearance	Clear liquid		
Colour	1 MAX	Gardner	ASTM D 1544
Viscosity @ 25°C	1000-2000	mPa.s	Brookfield RVTD, spindle 4
Amine Equivalent Weight	268-274		
Specific Gravity @ 21 °C	1.09		

ADVANTAGES

- Rapid hardness development
- Low color and excellent UV durability
- C3-type corrosion protection

APPLICATIONS

- Light industrial applications
- Structural steel
- Steel doors and window sills
- Storage tanks
- Railings
- Machinery
- Steel decking

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 on Amicure® IC-186 Curing Agent.

TYPICAL HANDLING PROPERTIES

Property	Value	Unit	Method
Isocyanate resin	HDI Trimer		21.8 wt% NCO, 2500cPS@ 25°C
Mix ratio (Amine to Isocyanate by weight)	1.05 -1.1		
Viscosity Build (250 g/l VOC)	52	min	time to 1000 cP
Carbamation Resistance	5		Scale 1-5, 5=best

DRY FILM TIMES (22°C 50% RH)

Property	Value	Unit
Set to touch	0.4	h
Tack free	2	h
Through cure	2.45	h

AMICURE® IC-186 WHITE TOP COAT STARTING POINT FORMULATION

Raw Materials — Part A	Pounds	Gallons	Supplier
Amicure® IC-186	306.08	34.49	Evonik
BYK 163	7.92	0.96	BYK
Tipure R 960 TiO ₂	341.45	10.35	Elementis
Part A Total	664.49	45.8	
Raw Materials — Part B	Pounds	Gallons	Supplier
Vestanat HT 2500/100	222.89	23.68	Evonik
Methyl Amyl Ketone	206.32	30.52	Eastman
Part B Total	425.74	54.20	
Part A + Part B	1090.23	100	
Formulation Properties	Values	Unit	
VOC	2.15	lb./gal	
Volume Solids	68.6		
Weight per gallon	10.9	lb./gal	
PVC	15.29	%	



AMICURE® IC-186 WHITE DTM STARTING POINT FORMULATION

Raw Materials — Part A	Pounds	Gallons	Supplier
Amicure® IC-186	305.83	33.35	Evonik
BYK 163	7.92	0.96	BYK
Tipure R 960 TiO ₂	289.04	10.35	Elementis
Heucophos ZAPP	61.17	0.74	Heaubach
Part A Total	663.96	45.4	
Raw Materials — Part B	Pounds	Gallons	Supplier
Vestanat HT 2500/100	228.94	24.33	Evonik
Methyl Amyl Ketone	206.32	30.27	Eastman
Part B Total	425.74	54.6	
Part A + Part B	1090.23	100	
Formulation Properties	Values	Unit	
VOC	2.15	lb./gal	
Volume Solids	68.6		
Weight per gallon	10.9	lb./gal	
PVC	15.29	%	

AMICURE® IC-186 CORROSION PERFORMANCE ON COLD ROLLED STEEL B 952 AND BLASTED STEEL

Salt spray 500 hrs	Corrosion creep	Face Blisters
Cold rolled Steel B952	10	10
Blasted Steel	10	10



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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, Chundong Road
Xinzhuang Industry Park
Shanghai, 201108
China

CL-Asiainfo@evonik.com

CL-Asiainfo@evonik.com

