

Technical Data Sheet

Polyester Curing

Hydroperoxide (Ambient temperature)

CUROX[®] VP-160A

Cumene Hydroperoxide
CAS# 80-15-9, 141-97-9 & 614-45-9
Liquid mixture, high activity

Description: Slightly yellowish, mobile liquid, consisting of a mixture based on cumene hydroperoxide. This product is used in combination with cobalt accelerators as an initiator (radical source) in the curing of unsaturated vinyl ester resins as well as Novolac resins at ambient temperature.

Technical Data:

Appearance	slightly yellowish liquid
Active oxygen	ca. 4.95%
w/w	
De-sensitising agent	none
Density at 20°C.....	ca. 1.03 g/cm ³
Viscosity at 20°C	ca. 4.3 mPa•s
Refractive index at 20°C.....	ca. 1.477
Miscibility	immiscible with water, miscible with alcohols, esters
Critical temperature (SADT)	ca. 70°C
Cold storage stability	freezing point below -25°C
Recommended storage temperature.....	below 30°C
Kick-off temperature	ca. 80°C

Application:

POLYESTER CURING: Special curing agent for vinyl ester- and Novolac-resins in combination with cobalt or cobalt/amine accelerators. Dosage: 1-2% as supplied, together with 0.5-1% Accelerator CA-12 / C-101.

"Shelf life" (gel time of resin + peroxide) several weeks at ambient temperature.

Sensitive to some fillers and heavy metal salts.

CURING CHARACTERISTICS: Moderate heat development, therefore not too much internal stress; nevertheless good degree of cure. Only little sensitive to air inhibition, especially if accelerator C-101 is used.

PROCESSING METHODS: Especially developed for curing VE-resins and Novolacresins, suitable for curing large and thick-walled laminates for virtually all processing methods. Especially suitable for coatings due to little air inhibition.

Activity:**Curing at ambient temperature:**

Curing of VE-resins in combination with accelerator CA-12 at 23°C Block Curing (50g)					
Formulation (parts by weight)					
Medium reactive resin type VE	100	100	100	100	100
CUROX® V-160A	2	2	2	1	1
Accelerator CA-12	2	1	0.5	1	0.5
Cure data minutes					
Gel time (t _{gel})	10	28	70	35	100
Time to peak (t _{max})	20	50	120	35	155
Cure factor (f _H = t _{max} / t _{gel})	2.0	1.8	1.7	1.6	1.6

Contact:

<http://www.united-initiators.com>

Disclaimer

This information and all further technical advice are reflecting our present knowledge and experience based on internal tests with local raw materials with the purpose to inform about our products and applications. The information should not be construed as guaranteeing specific properties of products described or their suitability for a particular application, nor as providing complete instructions for use. The information implies no guarantee for product and shelf life properties, nor any liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. We reserve the right to make any changes according to technological progress or further developments.

Application and usage of our products based on our technical advice is out of our control and sole responsibility of the user. The user is not released from the obligation to conduct careful inspection and testing of incoming goods in order to verify the suitability for the intended application.