

## ANDONOX CH

### DESCRIPTION

ANDONOX CH is a colourless to pale yellow liquid solution of cumene hydroperoxide. It is an economical free-radical initiator for unsaturated polyester resins, vinyl monomers and styrenation of oils and alkyds. ANDONOX CH may be used singly or in combination with other peroxides in both ambient and elevated temperature processes.

### TYPICAL PROPERTIES

Cumene hydroperoxide:	80-85 %
Active oxygen content:	8.7 %
Appearance:	Pale Yellow to Colourless liquid
Density at 25°C:	1.05 g/cm <sup>3</sup>
Flash point (Seta C.C.):	> 72°C
Soluble in:	Alcohols, ketones, esters, hydrocarbons
Slightly soluble in:	Water
SADT:	75°C
Storage temperature:	Max 25°C

### APPLICATION

ANDONOX CH is especially suitable for the cure initiation of unsaturated polyester resin systems at both ambient and elevated temperatures. The typical exotherm curve exhibited is usually mild and flat leading to a gradual, but thorough, cure. This characteristic can minimise crazing and cracking especially in thick cross-sections. ANDONOX CH is normally used in pre-promoted resin systems employing cobalt and/or manganese compounds as the primary accelerators.

**CAUTION: ANDONOX CH SHOULD NEVER BE MIXED WITH ACIDS OR DIRECTLY WITH PROMOTERS OR ACCELERATORS. A VIOLENT DECOMPOSITION CAN OCCUR WHICH MAY RESULT IN A FIRE AND/OR EXPLOSION.**

Primarily, ANDONOX CH is used in combination with higher exotherm producing peroxides when the normal operating temperature is under 82°C. These combinations will result in lower peak exotherms with the exact magnitude determined by the blend ratio. The use of ANDONOX CH in the blend will lengthen the cure time but should not diminish the ultimate cure.

When operating at temperatures over 82°C, ANDONOX CH can behave similar to high exotherm peroxide. Over 121°C, use of ANDONOX CH can give exotherms exceeding those normally expected for dibenzoyl peroxide or methyl ethyl ketone peroxide.

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### CURE CHARACTERISTICS

Resin: Epoxy Vinylester resin\*  
Initiator %: 1.5

Temperature: 25°C  
Accelerator %: 0.10 % (12 % Cobalt) + 0.05 % DMA

Initiator	Gel time	Time to peak	Peak Exotherm temp °C	935 Hardness			934 Hardness
	Min	Min		3 hr	4 hr	5 hr	24 hr
<b>ANDONOX CH</b>	<b>56</b>	<b>&gt;236</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>
ANDONOX CHM-50	16	61	92	41	50	55	14
NOROX MEKP-925H	18	41	128	10	30	32	5

\* Results determined by Syrgis Performance Initiators laboratory test methods and are used for comparison, only. Resin suppliers should be contacted for specific recommendations for individual resins.

### PACKAGING, SHIPPING & AVAILABILITY

- The standard package size of ANDONOX CH is 25 kg polyethylene bottles.
- Classification – Please refer to the specific ANDONOX CH Safety Data Sheet (SDS) under section 14 & 15, shipping & regulatory information. **NOTE:** SDS's for all Syrgis Performance Initiators products may be requested by contacting the company.
- ANDONOX CH is available through a global network. Call Syrgis Performance Initiators for the name of the distributor in your area.

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