

NOROX[®] CHP-90

Cumene Hydroperoxide/2-hydroperoxypropan-2-ylbenzene

CAS#18-15-9

Liquid mixture

Description

Norox[®] CHP 90 is a colorless to pale yellow liquid solution of cumyl hydroperoxide. It is an economical free-radical initiator for unsaturated polyester resins, vinyl monomers and styrenation of oils and alkyds. Norox[®] CHP 90 may be used singly or in combination with other peroxides in both ambient and elevated temperature processes.

Technical Data

Cumyl Hydroperoxide:	90.0 nominal
Form:	Liquid
Density @ 25°C:	1.05
Flash point (SETA C.C.)	150°F/66°C, min.
Soluble in:	Alcohols, Ketones, Esters, Hydrocarbons
Slightly soluble in:	Water

Application

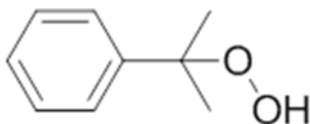
Norox[®] CHP 90 is especially suitable for the cure initiation of unsaturated polyester resin systems at both ambient and elevated temperatures. The typical exotherm curve exhibited is usually mild and flat leading to a gradual, but thorough, cure. This characteristic can minimize crazing and cracking especially in thick cross-sections. Norox[®] CHP 90 is normally used in pre-promoted resin systems employing cobalt and/or manganese compounds as the primary accelerators.

CAUTION: NOROX[®] CHP 90 SHOULD NEVER BE MIXED WITH ACIDS OR DIRECTLY WITH PROMOTERS OR ACCELERATORS. A VIOLENT DECOMPOSITION CANN OCCUR WHICH MAY RESULT IN FIRE AND/OR EXPLOSION

Primarily, Norox[®] CHP 90 is used in combination with higher exotherm producing peroxides when the normal operating temperature is less than 82°C (180°F). These combinations will result in lower peak exotherms with the exact magnitude determined by the blend ratio. The use of Norox[®] CHP 90 in the blend will lengthen the cure time but should not diminish the ultimate cure.

When operating at temperatures over 82°C (180°F). The combinations will result in lower exotherm peroxide. Over 121°C (250°F), use of Norox[®] CHP 90 can give exotherms exceeding those normally expected for dibenzoyl peroxide or methyl ethyl ketone peroxide.

Chemical Structure:



Molecular Weight – 152 g/mol
Empirical Formula– C₉H₁₂O₂

THERMAL DECOMPOSITION DATA:

Temperature	159°C (318°F)	190°C (374°F)	230°C (446°F)
Half-Life	10 hrs.	1.0 hr.	0.1 hr.

PACKAGING, SHIPPING & AVAILABILITY

- The standard package sizes of NOROX[®] CHP-90 are 4x8 lb and 44 lb (20 kg) polyethylene bottles.
- Classification – Please refer to the specific NOROX[®] CHP-90 Safety Data Sheet (SDS) under section 14 & 15, shipping & regulatory information. **NOTE:** SDS's for all United Initiators, Inc. products may be requested by contacting the company.
- NOROX[®] CHP-90 is available through a global network. Call United Initiators, Inc. for the name of the distributor in your area

Disclaimer

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