

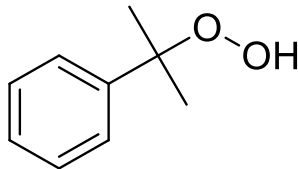
Technical Data Sheet (TDS)

NOROX[®]CHM-50
Thermoset (TS)

NOROX[®]CHM-50

Cumene hydroperoxide
CAS#80-15-9
Slightly yellow liquid

Structural Formula



Description

NOROX[®]CHM-50 is a solution of cumene hydroperoxide in an accelerating phlegmatizer. NOROX[®]CHM-50 is a liquid polymerisation initiator for the room temperature cure of vinyl ester resins with the following advantages / properties.

- Moderate peak exotherm, typically lower than MEKPs
- Moderate gel time in vinyl ester resins
- Excellent final cure
- Low impurity levels (water, hydrogen peroxide, salts, etc.)
- No gas generation

Technical Data

Appearance	slightly yellow liquid
Active oxygen (AO)	ca. 4.5 % w/w
Density at 20 °C	ca. 1.04 g/cm ³
Flash point	ca. 60 °C
Critical temperature (SADT)	ca. 60 °C
Recommended storage temperature	max. 30 °C ●
Storage stability as from date of delivery	6 months

Standard Packaging

5 kg and 25 kg in HDPE canisters
NAFTA: 8 lbs or 32 lbs in HDPE canisters

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Application

NOROX®CHM-50 is an excellent liquid polymerisation initiator for the room temperature cure of epoxy vinyl ester resins when a curing reaction in a reasonable time without gassing is required. The Gel- and Peak time is longer compared to MEKP products (e.g. NOROX®ENP-102). However, the final cured resin hardness is often better than for resins initiated with MEKPs. After the curing, the residual styrene is typically lower compared to similar systems cured with MEKPS.

Decomposition Products

Possible detectable decomposition products: 2-Phenyl-2-propanol, methane and acetophenone

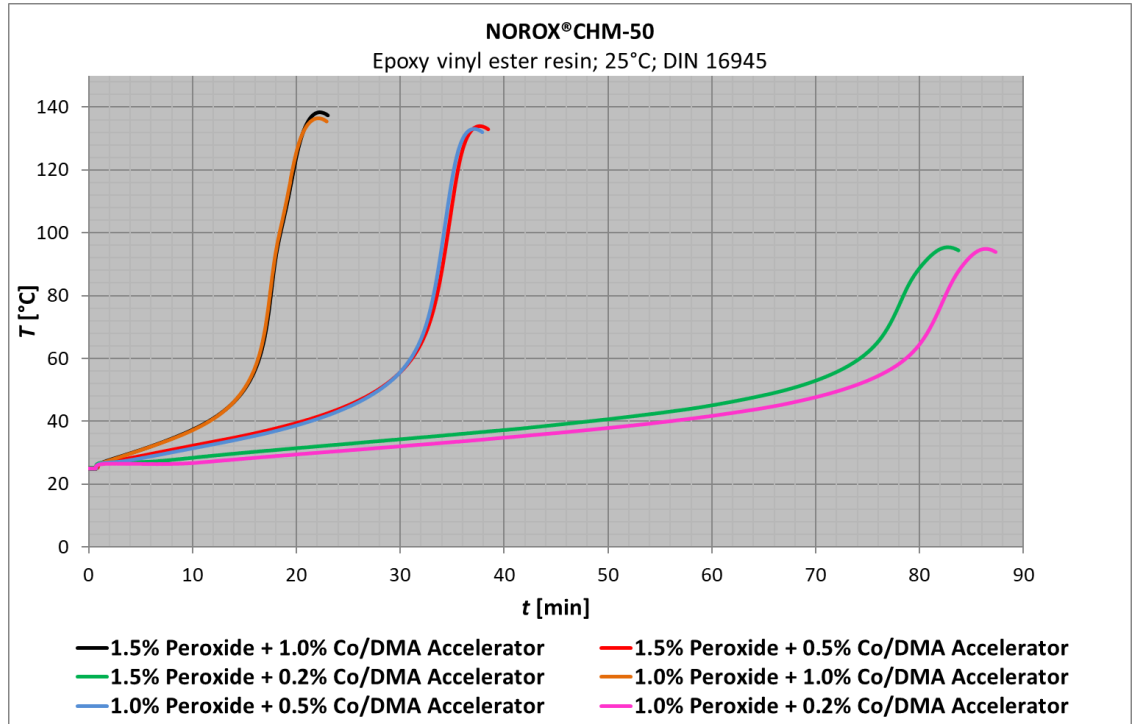
Storage

Avoid any source of heat, light, humidity and protect the product from impurities. Keep within save temperature limits.

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Measurements



Formulation (parts per weight)

Resin		100	100	100	100	100	100
NOROX®CHM-50	[Vol-%]	1.5	1.5	1.5	1.0	1.0	1.0
Co/DMA Accelerator	[Vol-%]	1.0	0.5	0.2	1.0	0.5	0.2
Curing Data							
Gel time 25 - 30 °C t_{gel}	[min]	4.2	6.6	15.0	4.3	7.9	22.2
Gel time 25 - 35 °C t_{gel}	[min]	8.4	14.4	32.4	8.5	15.5	40.9
Curing time t_{max}	[min]	22.2	37.7	82.8	22.2	37.1	86.4
Peak temperature T_{max}	[°C]	138	134	95	137	133	94

Disclaimer:

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