

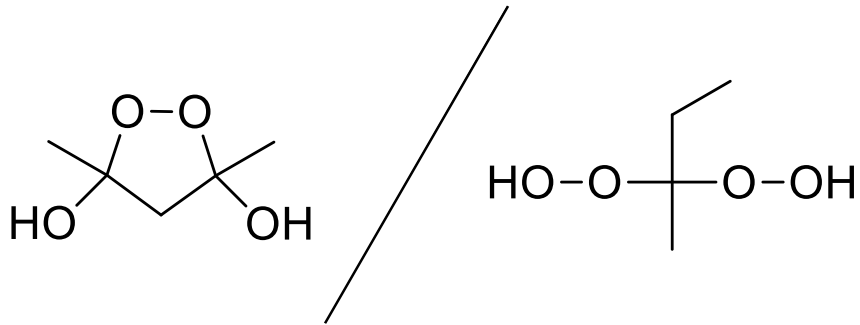
Technical Data Sheet (TDS)

NOROX®KPM
Thermoset (TS)

NOROX®KPM

Methyl ethyl ketone peroxide + acetylacetone peroxide
CAS#1338-23-4 + 13784-51-5
Liquid mixture

Structural Formula



Description

Colorless to slightly yellow liquid, consisting of methyl ethyl ketone peroxide and acetylacetone peroxide, phlegmatized with dimethyl phthalate. This mixture of ketone peroxides is suitable as a radical initiator for curing unsaturated polyester resins at 20 - 40 °C.

Main application: Curing of molded polyester parts at ambient temperature in combination with cobalt accelerator.

Technical Data

Appearance	Slightly yellow and clear liquid
Desensitising agent	Dimethylphthalate
Active oxygen (AO)	min. 7.7 % w/w
Density at 20 °C	ca. 1.13 g/cm ³
Viscosity at 20 °C	ca. 28 mPa·s
Flash point	> 65 °C
Miscibility	Immiscible with water, soluble in phthalates
Critical temperature (SADT)	ca. 60 °C
Recommended storage temperature	0 - 25 °C ●
Storage stability as from date of delivery	3 months

Standard Packaging

5 and 25 kg in HDPE canisters

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Application

CURING OF UNSATURATED POLYESTER RESINS:

This initiator is a special cold hardener for UP resins at ambient temperature in combination with cobalt accelerator. Smaller amounts of inhibitors can be used to increase the gel time. High dosage of inhibitors is generally not suitable as they reduce the reactivity of the peroxide.

CURING CHARACTERISTICS:

The gel time is similar to NOROX®KP-9, but curing is significantly faster. This initiator can be used as an alternative to NOROX®PD-40 when the high peak temperature causes cracking or residual stress problems. It can also be used as an alternative to NOROX®KP-9 if the surface properties of the end product need to be improved.

NOROX®KPM is not recommended for heat curing systems and not suitable for vinyl ester resins.

PROCESSING METHODS:

The product can be used for curing of moulded parts using various processes, such as hand lay-up, spray-up, RTM, continuous laminating, centrifugal casting, filament winding and polyester concrete.

Decomposition Products

Possible detectable decomposition products: methyl ethyl ketone, acetyl acetone, acetic acid, ethane

Storage

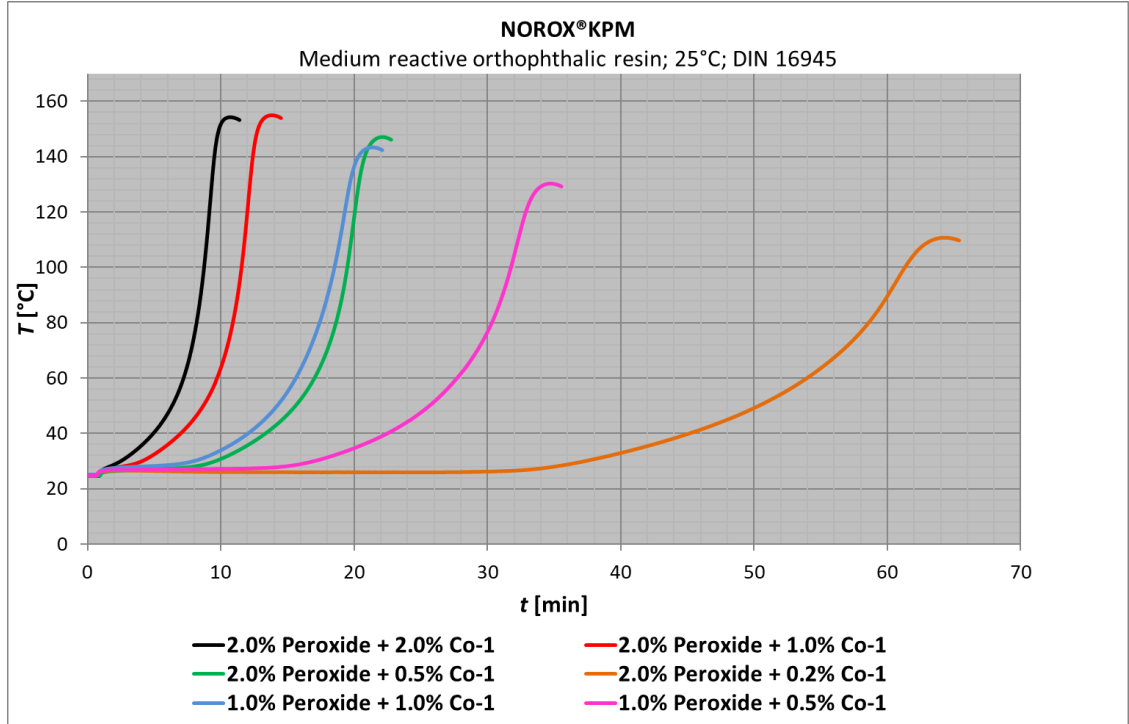
Avoid any source of heat, light, humidity and protect the product from impurities. Keep within safe temperature limits.

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Measurements



Formulation (parts per weight)

Resin		100	100	100	100	100	100
NOROX®KPM	[Vol-%]	2.0	2.0	2.0	2.0	1.0	1.0
Co-1	[Vol-%]	2.0	1.0	0.5	0.2	1.0	0.5
Curing data							
Gel time 25 - 30 °C t_{gel}	[min]	2.5	4.1	9.6	37.3	8.0	17.0
Gel time 25 - 35 °C t_{gel}	[min]	3.9	5.8	11.7	41.7	10.4	20.2
Curing time t_{max}	[min]	10.7	13.9	22.1	64.3	21.4	34.7
Peak temperature T_{max}	[°C]	154	155	147	111	143	130

Disclaimer:

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