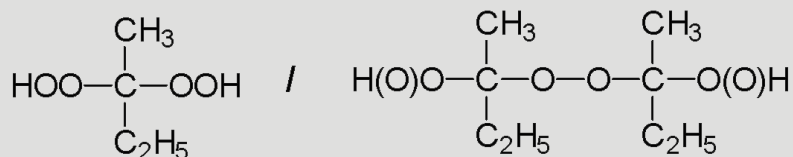


**CUROX® M-312**

Technical Data Sheet - Thermosets - Ketone peroxides (Ambient temperature)



Chemical Name	Methylethyl ketoneperoxide
CAS-No.	1338-23-4
Properties	Liquid mixture

Description

Colourless, mobile liquid, consisting of peroxides based on methyl ethyl ketone, essentially desensitised with aliphatic ester. This ketone peroxide is used as an initiator (radical source) in the curing of unsaturated polyester resins.

Main application: curing of moulded parts at ambient temperature in combination with cobalt accelerators.

Advantages: High efficiency with special preaccelerated and stabilized resin types.

Technical Data

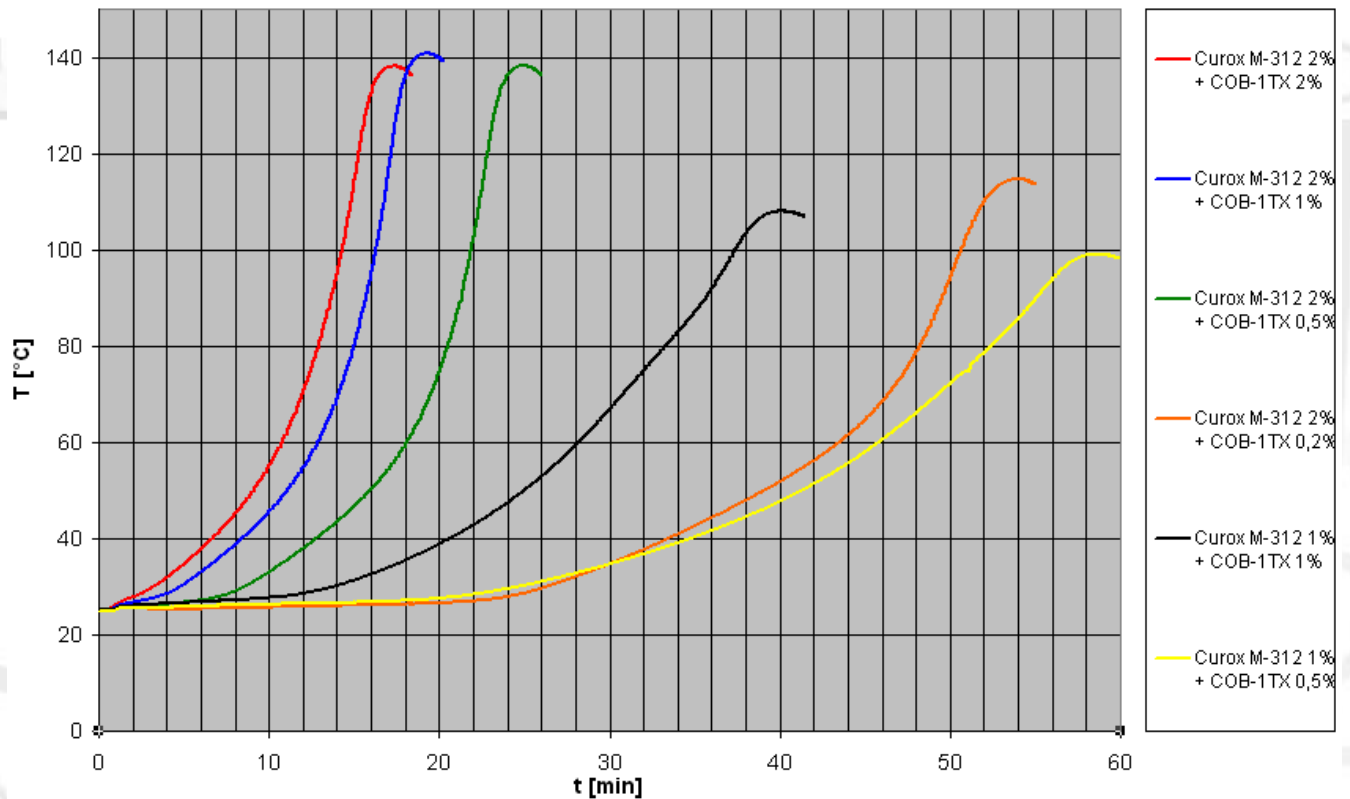
Property	Characteristics / Value
Appearance	colourless liquid
Active oxygen	ca. 8.6 - 9.1 % w/w
De-sensitising agent	aliphatic ester
Density at 20°C	ca. 1.01 g/cm ³
Viscosity at 20°C	ca. 13 mPas
Miscibility	immiscible with water, miscible with ester, alcohol
Critical temperature (SADT)	>50 °C
Cold storage stability	liquid to below -25 °C
Recommended storage temperature	below 30 °C
Storage stability (activity) as from date of delivery	6 months

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Technical Data Sheet - Thermosets - Ketone peroxides (Ambient temperature)

Activity:

"Cobalt Curing" after DIN 16945 at 25°C with OPA resin (20g in a test tube)						
Formulation (parts by weight)						
Medium reactive resin type (OPA)	100	100	100	100	100	100
CUROX® M-312	2	2	2	2	1	1
Accelerator COB-1TX	2	1	0.5	0.2	1	0.5
Curing data						
Gel time t_{gel} [min]	3.5	4.5	8.5	26.0	13.5	24.0
Curing time t_{max} [min]	17.0	19.0	25.0	53.5	40.0	59.5
Peaktemperature T_{max} [°C]	139	141	137	115	109	93





CUROX® M-312

Technical Data Sheet -Thermosets - Ketone peroxides (Ambient temperature)

Application

POLYESTER CURING:

Curing agent for all UP resin types at ambient temperature in combination with cobalt accelerators. Standard dosage level: 1-3% as supplied, with 0.2-2% of a 1% cobalt solution.

"Shelf life" (gel time of resin + peroxide) usually only a few hours, depending on temperature and resin type.

"Pot life" (gel time of resin + peroxide + accelerator) relatively short, but may be prolonged by adding Inhibitor TC-510. Thus, the mould release factor (fMR = tMR/tgel) can be improved considerably.

CURING PERFORMANCE:

Moderate evolution of heat. Relatively long mould release time, moderate mould release factors. Temperatures below 20°C prolong curing times considerably, alternatively cobalt / amine accelerators should then be used.

PROCESSING METHODS:

Particularly hand lay-up, spray lay-up, centrifugal casting, filament winding, casting of resins, and surface coatings (putties, fillers, gelcoats and topcoats).

SPRAY EQUIPMENT:

Use spray equipment in accordance with manufacturer's instructions. Ensure all safety devices are operational. Do not clear gun by spraying MEKP into the air.

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