

CUROX® M-372

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 ketoneperoxides, essentially desensitised with aliphatic solvents. This ketone peroxide is used as an initiator (radical source) in the curing of unsaturated polyester resins.

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

Technical Data					
Property	Characteristics / Valu				
Appearance	colourless liquid				
Active oxygen	ca. 7.4 % w/w				
De-sensitising agent	aliphatic solvents				
Density at 20°C	ca. 1.03 g/cm³				
Viscosity at 20°C	ca. 18 mPas				
Miscibility	immiscible with water,				
	miscible with ester, UP/VE-resins				
Critical temperature (SADT)	ca. 50 °C				
Cold storage stability	liquid to below -25 °C				
Recommended storage temperature	below 30 °C				
Storage stability (activity) as from date of delivery	3 months				

Product Information 03.02.2012 UI 5141

Contact: http://www.united-initiators.com/

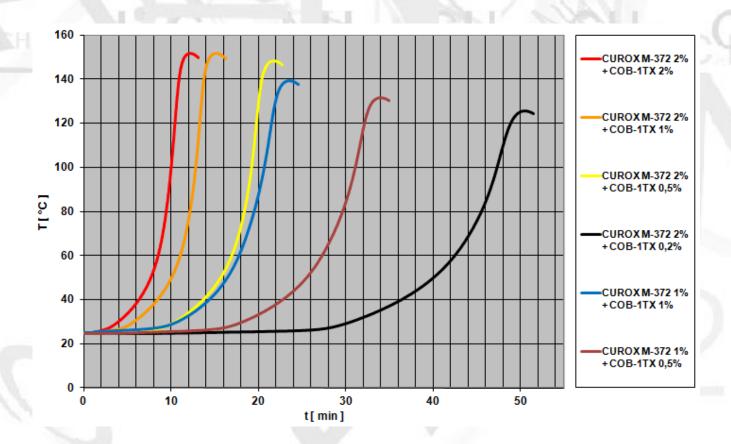


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Activity:

"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-372	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]	4.0	6.0	10.5	30.5	11.0	18.0	
Curing time t _{max} [min]	12.0	15.5	22.0	50.5	23.5	34.0	
Peaktemperature T _{max} [°C]	152	151	147	126	138	131	





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Application - Polyester curing

- Usage level:

Specific 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 characteristics:

Medium evolution of heat, short mould release time. Temperatures below 20°C prolong curing times considerably, alternatively cobalt / amine accelerators should then be used.

- Processing methods:

Hardener for Resin Transfer Moulding (RTM), but also suitable for hand lay-up, spray lay-up, centrifugal casting, filament winding and casting of resins.

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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