Technical Data Sheet



CUROX® M-340

Methyl ethyl ketone peroxide CAS#1338-23-4 Liquid mixture, Super Activity

Formula

Description

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

Technical Data

Appearance	colourless liquid
Active oxygen	7.5% w/w min
De-sensitising agent	phthalate plasticiser
Density at 20°C	ca. 1.136 g/cm ³
Viscosity at 20°C	ca. 23 mPa.s
Miscibility	Immiscible with water, soluble in phthalates
Critical temperature (SADT)	ca. 60°C
Recommended storage temperature	below 30°C
Maintenance of activity at below 30°C	ca. 3 months
Kick off temperature in UP resin	ca. 70°C
Supply form	5 Kg polyethylene container

Application

POLYESTER AND VINYL ESTER CURING: Curing agent for polyester and vinyl ester resins at ambient temperature in combination with cobalt accelerators. Dosage 1-3% as supplied, with 0.5-2% 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. Other grades include Curox M-100, Curox M-200 and Curox M-300.

Technical Data Sheet



Application

<u>CURING PERFORMANCE:</u> Curox M-340 is recommended for polyester curing. Curox M-340 gives longer gel times, but shorter cure times relative to those obtained using other grades of MEKP. Rapid evolution of heat, therefore relatively short mould release times. Low ambient temperatures retard complete curing considerably. Action: amine accelerator may be added, although yellow-brown discolouration in finished parts may occur.

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.

Safety & Handling

The product should be stored in the closed supply container at temperatures **below +30°C**. Keep in a well-ventilated place. Keep away from ignition and heat sources (e.g. direct sun light). Keep separated from other dangerous and incompatible substances. Avoid contamination with e.g. rust, dust, ash (danger of decomposition).

Avoid contact with skin, eyes and clothing. At the end of work and before breaks, hands should be washed. Prophylactic skin protection recommended.

Use with adequate ventilation. Suction off product vapours at their point of generation. Avoid formation of aerosols. Do not breathe vapour/ aerosol. Wear suitable respiratory protection if necessary.

Peroxide residues must not be returned into the original container, danger of decomposition!

Disclaimer

This information and all further technical advice are reflecting our present knowledge and experience based on internal tests with local raw materials with the purpose to inform about our products and applications. The information should not be construed as guaranteeing specific properties of products described or their suitability for a particular application, nor as providing complete instructions for use. The information implies no guarantee for product and shelf life properties, nor any liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. We reserve the right to make any changes according to technological progress or further developments

Application and usage of our products based on our technical advice is out of our control and sole responsibility of the user. The user is not released from the obligation to conduct careful inspection and testing of incoming goods in order to verify the suitability for the intended application.

United Initiators **EU**T: +49 89 74422 237
F: +49 89 74422 6237
cs-initiators.eu@united-in.com

United Initiators
Nafta
T: +1 800 231 2702
F. +1 440 323 0898
cs-initiators.nafta@united-in.com

United Initiators
China
T: +86 20 6131 1370
F: +86 139 2503 8952
cs-initiators.cn@united-in.com

United Initiators
Australia
T: +61 2 9316 0046
F: +61 2 9316 0034
cs-initiators.au@united-in.com

www.united-initiators.com

Revision number: 10.0. Date: 03.03.14. Device M: TDS.