

NOROX[®] MEC FRED

Methyl ethyl ketone peroxide/Cyclohexanone Peroxide

CAS#1338-23-4

12262-58-7

Liquid mixture

Description

Norox[®] MEC FRED is a red solution of methyl ethyl ketone peroxide and cyclohexanone peroxide in phlegmatizer. Norox[®] MEC FRED was developed to give excellent cure performance in low and average temperature conditions when used as an initiator with unsaturated polyester resins. *Note: The addition of the red dye added to this material will aid in mixing and indicate proper cure has been achieved when color fades away.*

Technical Data

Active oxygen	9.0 max
Form:	Liquid
Color:	Water white
Specific Gravity @ 25°C:	1.12
Viscosity @ 25°C:	18.0 cps
Flash point (SETA C.C.)	170°F / 77°C, min
Soluble in:	Oxygenated organic solvents
Slightly soluble in:	Water

Application

Norox[®] MEC FRED should be considered for gel and cure initiation for cobalt promoted unsaturated polyester resins at low operating temperatures. Norox[®] MEC FRED will also give good performance at normal temperatures. Other advantages, compared to standard MEKP formulations include:

1. Shorter gel to cure time in many resins.
2. Excellent smoothness and uniformity in the cure cycle.
3. Excellent storage stability because of the absence of impurities (water, hydrogen peroxide, unreacted methyl ethyl ketone and other diluents).
4. Enhanced performance with gel coats. (The hydrophobic nature of Norox[®] MEC FRED provides improved mixing and resin compatibility).

Technical Data Sheet



RESIN: Ortho Laminating (pre-promoted)

Initiator	Gel Time	Peak Exotherm	Gel to Cure	Barcol Hardness@ 3 hrs.	5hrs.	24 hrs.
Norox® MEKP-9	15.9 min.	328°F	71 min.	5(4)	15(4)	34(4)
Norox® MEKP-925	16.2 min.	336°F	76 min.	5(4)	7(4)	32(4)
Norox® MEC FRED	14.9 min.	330°F	61 min.	6(4)	16(4)	34(4)

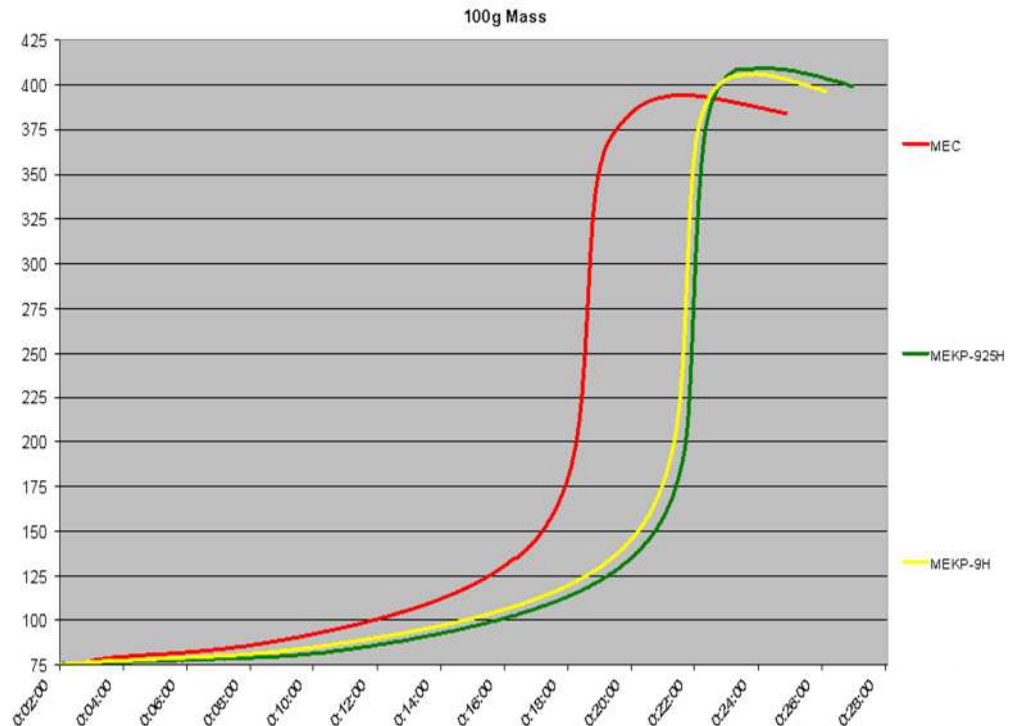
Results determined by United SPI laboratory test methods and are to be used for comparison, only.

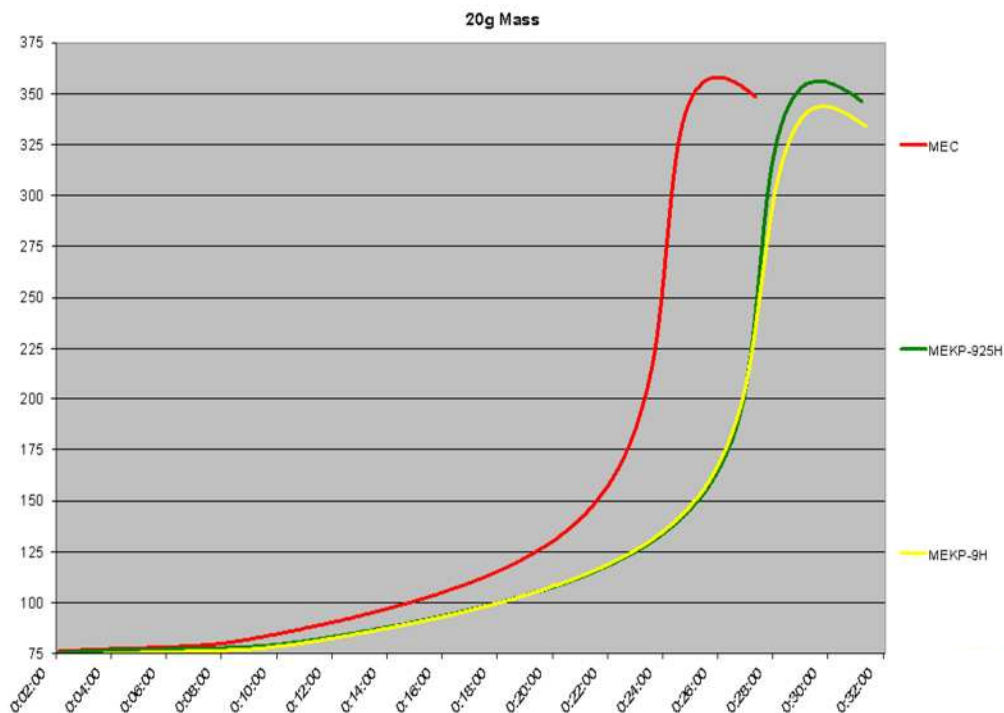
Resin suppliers should be contacted for specific recommendations for individual resins.

Resin: Typical ISO Marble Clear Gel Coat

Initiator Level: 2.0% Resin Temp: 77°F

Initiator	Gel Time	Peak Temp	Time to Peak	20g Peak	Tack Free	Barcol Hardness@ 3hrs.	5hrs.	24hrs.
Norox® MEKP-9H	13.8 min.	406°F	23.9 min.	344°F	79 min.	35(D)	55(5)	15(4)
Norox® MEKP-925H	13.2 min.	423°F	24.0 min.	356°F	82 min.	15(5)	70(5)	20(4)
Norox® MEC FRED	11.6 min.	394°F	21.5 min.	358°F	75 min.	20(5)	60(5)	20(4)





PACKAGING, SHIPPING & AVAILABILITY

- The standard package sizes of NOROX® MEC FRED are 4x8 lb and 44 lb (20 kg) polyethylene bottles.
- NOROX® MEC FRED is available pre-dyed in 44 lb (20kg) bottles. Please see United Initiators, Inc. TDS for Peroxide Dye Concentrates.
- Classification – Please refer to the specific NOROX® MEC FRED Safety Data Sheet (SDS) under section 14 & 15, shipping & regulatory information. **NOTE:** SDS's for all United Initiators, Inc. products may be requested by contacting the company.
- NOROX® MEC FRED is available through a global network. Call United Initiators, Inc. for the name of the distributor in your area.

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: 1.0. Date: 03.03.2015. Device M: TDS.