

NOROX[®]KP-9 FRED

Methyl ethyl ketone peroxide

CAS#1338-23-4

Liquid mixture

Description

NOROX[®]KP-9 FRED is a Red dyed, mobile liquid, consisting of peroxides based on methylethylketone, essentially desensitized with phthalate plasticizer. This ketone peroxide is used as an initiator (radical source) in the curing of unsaturated polyester resins. Main application: curing of molded, casted or wound glass fibre reinforced products at ambient temperature in combination with cobalt accelerators. This red dyed version helps to control homogenous mixing and during curing discoloration will take place again.

Technical Data

Appearance	RED and clear liquid
Active oxygen	9.0 - 9.2 %
Free hydrogen peroxide content	1.6 - 1.8 %
Water content	1.5 %
Flash point	> 80°C (Method: Seta closed cup)
Density at 20°C	1.12 - 1.15 g/cm ³
Viscosity at 20°C	9 - 15 mPa.s
Soluble in:	Oxygenated organic solvents
Slightly soluble in:	Water
Critical temperature (SADT)	65°C
Recommended storage temperature	Max 30°C.
Maintenance of activity at 30°C as from date of delivery	6 months

Application

NOROX[®]KP-9 FRED is a general purpose MEKP and is the workhorse of the United Initiators line. NOROX[®]KP-9 FRED gives consistent room temperature performance with both resins and gelcoats. A reliable product of remarkable purity, NOROX[®]KP-9 FRED assures quality in almost every system. Suitable applications are: Hand lay-up, spray-up, RTM, continuous laminating, centrifugal casting, filament winding, polyester concrete and vacuum infusion. A single MEKP initiator formulation cannot provide optimum results in all resin systems. Evaluation of each MEKP in each resin intended for use is absolutely essential before full-scale manufacturing is attempted.

Measurements

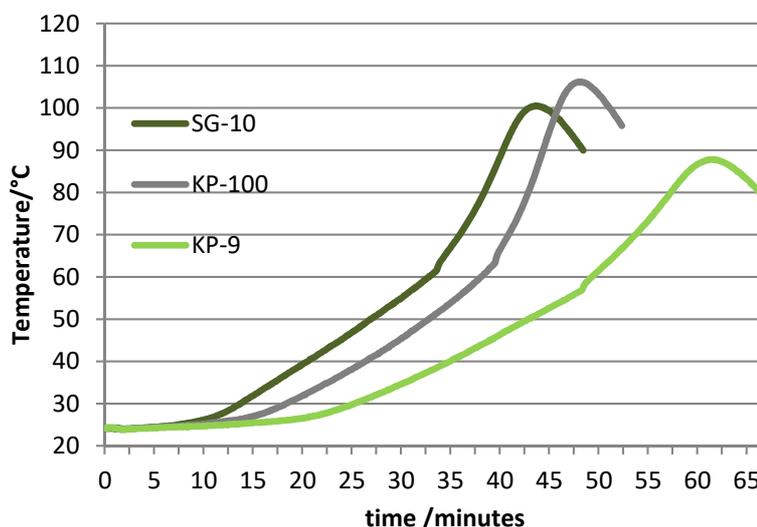
CURE CHARACTERISTICS

A reactivity test with an unsaturated polyester resin gave the following results:

Resin: Orthophthalic polyester Temperature: 25°C
Initiator %: 1.5 Accelerator: 0,5 % (1% Cobalt)

Initiator	Gel time Min	Time to peak min	Peak exotherm temp °C
NOROX®KP-9 FRED	25	61	88
NOROX®KP-100	18	48	106
NOROX®SG-10	13	44	101

Reactivity of NOROX® MEKPs:



Standard Packaging

The standard package sizes of NOROX®KP-9 FRED are 5 kg and 25 kg polyethylene bottles.

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.

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