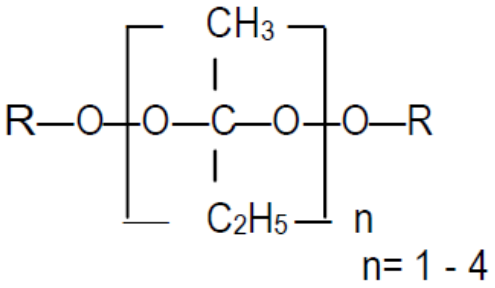
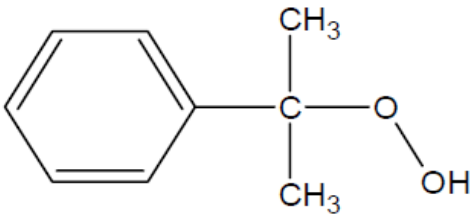
TECHNICAL DATA SHEET

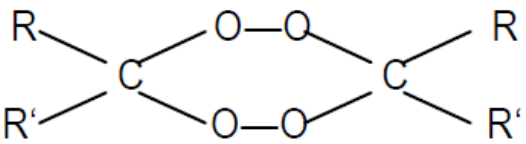
PEROXAN ME 50 LU 1X

DESCRIPTION

Mixture of Methyl Ethyl Ketone peroxide(s) and Cumene hydroperoxide
Solution in TXIB
PEROXAN ME 50 LU 1X is used for curing of polymer concrete with high ratios resin to fillers, vacuum injection, RTM plus filament windings of tubes and tanks with bigger wall sizes. The curing reaction is performed at ambient temperatures and always in combination with Cobalt accelerators







CAS Bo. (activice substance):
1338-23-4
80-15-9

TECHNICAL DATA

Appearance	light yellow, clear liquid
Active oxygen assay	9,10 %
Density at 20 °C	1,02 g/cm3

SOLUBILITY

Insoluble in water, soluble in phthalates

STORAGE

Maximum storage temperature ($T_{s\ max}$)	30 °C
Minimum storage temperature ($T_{s\ min}$)	0 °C
Storage stability as from date of delivery	6 months

Keep packaging tightly closed in a well ventilated place at indicated storage temperature. Keep away from reducing agents e.g. amines, acids, alkalis, heavy metal compounds (e.g. accelerators, driers, metal soaps). Never weigh out in storage room.

HAZARDOUS REACTIONS

Oxidizing agent. Decomposes violently under the influence of heat or by contact with reducing agent.
Never mix with accelerators.

SAFETY CHARACTERISTICS

Flash point	72 °C
SADT*	> +60 °C

PACKAGING

30 kg Container

MAJOR DECOMPOSITION PRODUCTS

Carbon dioxide, Water, Aetic acid, Formic acid, Propionic acid, Methyl Ethyl Ketone
Acetophenone, 2-Phenylisopropanole, Methan
* SADT = Self Accelerating Decomposition Temperature

APPLICATION

PEROXAN ME-50 LU1X is very well suitable for curing of unsaturated polyester resins at ambient and slightly elevated temperatures. **PEROXAN ME-50 LU1X** has to be utilized always in combination with Cobalt accelerators. **PEROXAN ME-50 LU1X** is not suitable for hot curing applications.
The system **PEROXAN ME-50 LU1X** / Cobalt accelerators does not badly influence the UV resistance properties of the final parts.
PEROXAN ME-50 LU1X is used for curing of polymer concrete with high ratios resin to fillers, vacuum injection, RTM plus filament windings of tubes and tanks with bigger wall sizes made by e. g. hand laminate, fibre spraying or continuous processing.

Advantage: Using of **PEROXAN ME-50 LU1X** will result in a reduced peak temperature during curing reaction compared with a standard active MEKP, e. g the PEROXAN ME-50 L and therefore will avoid formation of cracks.
Even more reduced peak temperatures can be achieved while utilizing PEROXAN ME-50 LU or PEROXAN ME-50 LU-2.
The gel and curing times achievable by the system **PEROXAN ME-50 LU1X** / Cobalt accelerators can be varied within a broad range by variation of the accelerator dosage.

A high degree of curing can be achieved by post curing at a temperature range from 80 °C up to 100 °C with duration of 2 to 8 hours.

Ambient temperatures should not fall below 18 °C when the system **PEROXAN ME 50 LU1X** / Cobalt accelerators are applied. At lower temperatures the system may remain undercured due to heavily decreased efficiency.
Humidity, certain fillers and pigments may badly influence the curing properties of the system **PEROXAN ME-50 LU1X** / Cobalt accelerators.

TECHNICAL DATA SHEET

PEROXAN ME 50 LU 1X

DOSAGE

Depending on working conditions, the following peroxide and accelerator dosage levels are recommended:

PEROXAN ME 50 LU1X 1.0 to 3.0 phr
PERGAQUICK C12 X (Co accelerator 1%): 0.3 to 2.0 phr

based on unsaturated polyester resin and Styrene to be 100 phr. The dosage depends further on the required gel and demoulding times, the processing temperatures, the thickness of the laminates and the activity of the polyester resin.

SAFETY AND HANDLING

Please refer to the material safety data sheet (MSDS) for information concerning safe storage, use and handling of **PEROXAN ME-50 LU1X**. This information should be thoroughly reviewed prior to acceptance of this product.

06/2016

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