

# **Butanox M-60**

Methyl ethyl ketone peroxide

Butanox M-60 is the work horse in GRP curing systems, with 10% higher active oxygen compared to Butanox M-50. Medium-reactive, general purpose methyl ethyl ketone peroxide (MEKP) with guaranteed low water content, used for curing unsaturated polyester resins in the presence of a cobalt accelerator at room and elevated temperatures.

CAS number 1338-23-4

EINECS/ELINCS No. 215-661-2

TSCA status listed on inventory

## **Specifications**

Appearance	Clear colorless liquid
Total active oxygen	9.8-10.0 %
Water content	3.0 max. %

#### Characteristics

Density, 25 °C	1.14-1.18 g/cm³
Viscosity, 20 °C	25 mPa.s

## **Applications**

Butanox M-60 is a general purpose methyl ethyl ketone peroxide (MEKP) for the curing of unsaturated polyester resins in the presence of a cobalt accelerator at room and elevated temperatures. Butanox M-60 is a 10% higher concentrated version of Butanox M-50. The curing system Butanox M-60/cobalt accelerator is particularly suitable for the curing of gelcoat resins, laminating resins, lacquers and castings; moreover the manufacture of light resistant parts may be possible contrary to the curing system benzoyl peroxide/amine accelerator.

## Thermal stability

Organic peroxides are thermally unstable substances, which may undergo self-accelerating decomposition. The lowest temperature at which self-accelerating decomposition of a substance in the original packaging may occur is the Self-Accelerating Decomposition Temperature (SADT). The SADT is determined on the basis of the Heat Accumulation Storage Test.

SADT	60°C
Method	The Heat Accumulation Storage Test is a recognized test method for the determination of the SADT of organic peroxides (see Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria - United Nations, New

York and Geneva).

## Storage

Due to the relatively unstable nature of organic peroxides a loss of quality can be detected over a period of time. To minimize the loss of quality, Nouryon recommends a maximum storage temperature (Ts max.) for each organic peroxide product.

Ts Max.	25°C
Note	When stored under the recommended storage conditions, Butanox M-60 will remain within the Nouryon specifications for a period of at least 6 months after
	delivery.

# Packaging and transport

The standard packaging is a 30 l HDPE can (Nourytainer) for 30 kg peroxide solution. In Asia Pacific the standard packaging is a 30 l HDPE can for 20 kg peroxide solution. Both packaging and transport meet the international regulations. For the availability of other packed quantities contact your Nouryon representative. Butanox M-60 is classified as Organic peroxide type D; liquid; Division 5. 2; UN 3105.

# Major decomposition products

Carbon dioxide, water, acetic acid, formic acid, propionic acid, methyl ethyl ketone.

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