



Butanox HBO-50

Methyl ethyl ketone peroxide in dimethyl phthalate

Butanox® HBO-50 is a methyl ethyl ketone peroxide (MEKP) for curing unsaturated polyester resins in the presence of a cobalt accelerator at room and elevated temperatures, for example for corrugated sheets.

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 %

Characteristics

Density, 20 °C	1.180 g/cm ³
Viscosity, 20 °C	19 mPa.s

Applications

Butanox® HBO-50 is a methyl ethyl ketone peroxide (MEKP) for the curing of unsaturated polyester resins in the presence of a cobalt accelerator at room and elevated temperatures. The curing system Butanox® HBO-50/cobalt accelerator is particularly suitable for the curing of laminating resins and lacquers when a faster gelation and initial cure speed is required than can be obtained with Butanox® M-50. Moreover the manufacture of light resistant parts may be possible contrary to the curing 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	65°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® HBO-50 will remain within the Nouryon specifications for a period of at least 3 months after delivery.

Packaging and transport

The standard packaging is a 30 l HDPE can (Nourytainer®) 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® HBO-50 is classified as Organic peroxide type D; liquid; Division 5. 2; UN 3105; PG II.

Safety and handling

Keep containers tightly closed. Store and handle Butanox® HBO-50 in a dry well-ventilated place away from sources of heat or ignition and direct sunlight. Never weigh out in the storage room. Avoid contact with reducing agents (e. g. amines), acids, alkalis and heavy metal compounds (e. g. accelerators, driers and metal soaps). Please refer to the Safety Data Sheet (SDS) for further information on the safe storage, use and handling of Butanox® HBO-50. This information should be thoroughly reviewed prior to acceptance of this product. The SDS is available at nouryon.com/sds-search.

Major decomposition products

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

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