

Butanox M-50

Methyl ethyl ketone peroxide

The work horse in GRP curing systems. 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

EINNECS/ELINCS No.

1338-23-4 215-661-2

TSCA status

listed on inventory

Specifications

| Appearance | Clear colorless liquid |
|---------------------|------------------------|
| Total active oxygen | 8.8-9.0 % |

Characteristics

| Density, 20°C | 1.180 g/cm ³ |
|-----------------|-------------------------|
| Viscosity, 20°C | 24 mPa.s |

Applications

Butanox M-50 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. The curing system Butanox M-50/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-50 will remain within the AkzoNobel 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-50 is classified as Organic peroxide type D; liquid; Division 5. 2; UN 3105.

Safety and handling

Keep containers tightly closed. Store and handle Butanox M-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 Material Safety Data Sheet (MSDS) for further information on the safe storage, use and handling of Butanox M-50. This information should be thoroughly reviewed prior to acceptance of this product. The MSDS is available at https://polymerchemistry.nouryon.com.

Major decomposition products

Carbon dioxide, Water, Acetic acid, Formic acid, Propanoic acid, Methyl ethyl ketone

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