

Perkadox BT-50

Dibenzoyl peroxide, 50% in DMP/TXIB

Perkadox BT-50 is a dibenzoyl peroxide presented in homogeneous paste with 50% of diluted dibenzoyl peroxide. Perkadox BT-50 is used as polymerization initiator in unsaturated polyester and vinyl ester resins.

CAS number EINECS/ELINCS No. 94-36-0 202-327-6

TSCA status Molecular weight listed on inventory 242.2

Active oxygen content peroxide 6.61%

Specifications

Active oxygen	3.24 - 3.37% %
Assay	49.0 - 51.0 %

Notes

Perkadox BT-50 can be supplied in two different colors: white and grey

Applications

Perkadox BT-50 is used as a polymerization initiator for unsaturated polyester resins or pre-accelerated vinyl esters. The most widely used promoter is dimethyl aniline (DMA). The main features of this product are the high resistance to external temperature fluctuations and the relatively short release time of the part. The transformer must be aware of the fact that amine accelerators can cause a kind of yellow color in the final piece. Because it is supplied in paste, it is easier and safer to apply than powdered dibenzoyl peroxides, since it can be added directly to resins. Perkadox BT-50 is mainly used in pultruded profiles and plastic mass.

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	50°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.	30°C
Note	When stored under these recommended storage conditions, Perkadox BT-50 will remain within the Nouryon specifications for a period of at least 12 months after delivery.

Packaging and transport

The standard packaging is a HDPE bucket for 20 kg peroxide. Both packaging and transport meet the international regulations. For the availability of other packed quantities contact your Nouryon representative. Perkadox BT-50 is classified as Organic peroxide type E; solid; Division 5.2; UN 3108.

Safety and handling

Keep containers tightly closed. Store and handle Perkadox BT-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 Perkadox BT-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, benzoic acid, benzene, carbon oxide

All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are believed to be reliable. Nouryon, however, makes no warranty as to accuracy and/or sufficiency of such information and/or suggestions, as to the product's merchantability or fitness for any particular purpose, or that any suggested use will not infringe any patent. Nouryon does not accept any liability whatsoever arising out of the use of or reliance on this information, or out of the use or the performance of the product. Nothing contained herein shall be construed as granting or extending any license under any patent. Customer must determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes. The information contained herein supersedes all previously issued information on the subject matter covered. The customer may forward, distribute, and/or photocopy this document only if unaltered and complete, including all of its headers and footers, and should refrain from any unauthorized use. Don't copy this document to a website.

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