

Perkadox PF-MT40

tert-Butyl monoperoxymaleate, 40% in dibutyl maleate

Perkadox® PF-MT40 is a 40% suspension which is used for room temperature curing of acrylic solid surface without yellow discoloration. It is used in combination with Accelerator CTAS for room temperature cure.

CAS number
1931-62-0

EINECS/ELINCS No.
217-691-1

TSCA status
listed on inventory

Molecular weight
188.2

Active oxygen content peroxide
8.5%

Concentration
3.23-3.57%

Specifications

Appearance	Paste
Assay	38.0 - 42.0 %

Characteristics

Density, 25 °C	0.850 g/cm ³
Viscosity, 25 °C	25000-50000 mPa.s

Applications

Perkadox® PF-MT40 can be used as for the ambient temperature curing of MMA resins. Without the addition of an accelerator, the cure of the acrylate resin starts only above the activation temperature of 90°C. For the cure at ambient temperature, Perkadox® PF-MT40 must be accelerated with a combination of special accelerators. Together with the Accelerators R-913 and Ca(OH)₂, a reasonable geltime is obtained with a fast cure at ambient temperatures. The most important advantage of a cure system based on Perkadox® PF-MT 40 is the absence of yellow discoloration and a lower residual monomer content compared to results obtained with a BPO/amine curing system.

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 (122°F)
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 (77°F)
Note	When stored under the recommended storage conditions, Perkadox® PF-MT40 will remain within the Nouryon specifications for a period of at least 3 months after delivery.

Packaging and transport

In North America Perkadox® PF-MT40 is packed in non-returnable, 5 gallon polyethylene containers of 39.7 lb net weight. In other regions the standard packaging is plastic pails for 14 kg peroxide. Both packaging and transport meet the international regulations. For the availability of other packed quantities contact your Nouryon representative. Perkadox® PF-MT40 is classified as Organic peroxide type E; solid, Division 5.2; UN 3108; PG I.

Safety and handling

Keep containers tightly closed. Store and handle Perkadox® PF-MT40 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® PF-MT40. This information should be thoroughly reviewed prior to acceptance of this product. The SDS is available at nouryon.com/sds-search.

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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