

Perkadox GB-45C

Dibenzoyl peroxide

Perkadox GB-45C is a free-flowing 45% peroxide formulation on a phthalate-free carrier for curing unsaturated polyester resins and (meth)acrylic resins at ambient and elevated temperatures. Provides excellent solubility in standard thermoset curing applications.

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

TSCA status Active oxygen content not listed on inventory peroxide 2.97%

Specifications

Appearance	White free flowing powder
Assay	40.0 - 45.0 %

Applications

Perkadox GB-45C is a free flowing, almost dust-free, granular powder containing up to 45% dibenzoyl peroxide. Perkadox GB-45C is used for the curing of unsaturated polyester and (meth)acrylic resins at ambient and elevated temperature. At temperatures up to 80°C, Perkadox GB-45C should be used in combination with an aromatic tertiary amine accelerator. Above 80°C the use of an accelerator is not required. Perkadox GB-45C dissolves clearly in the resin system and is therefore very suitable for the production of cured parts with acrylic resins when a high degree of transparency is required.

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	55°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 these recommended storage conditions, Perkadox GB-45C will remain within the Nouryon specifications for a period of at least 12 months
	after delivery.

Packaging and transport

The standard packaging is a non-returnable cardboard box for 25 kg net. Both packaging and transport meet the international regulations. For the availability of other packed quantities consult your Nouryon representative. Perkadox GB-45C is classified as Organic peroxide type D, solid; Division 5. 2; UN 3106.

Safety and handling

Keep containers tightly closed. Store and handle Perkadox GB-45C 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 GB-45C. 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, benzene, benzoic acid, diphenyl, phenylbenzoate

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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