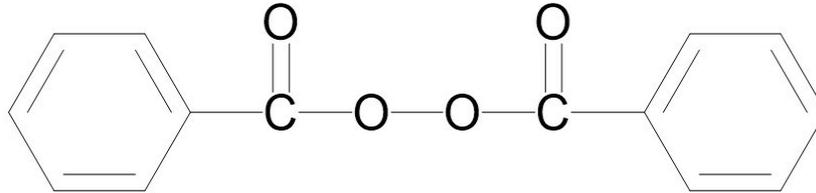


Perkadox GB-50X

Dibenzoyl peroxide



Perkadox® GB-50X is a free-flowing 50% 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
94-36-0

EINECS/ELINCS No.
202-327-6

TSCA status
not listed on inventory

Active oxygen content peroxide
3.3%

Specifications

| | |
|------------|---------------------------|
| Appearance | White free flowing powder |
| Assay | 48.0-50.0 % |

Characteristics

| | |
|---------------------|-------------------------|
| Bulk density | 640 kg/m ³ |
| Density | 1.343 g/cm ³ |
| Poured bulk density | 666 kg/m ³ |
| Tapped bulk density | 766 kg/m ³ |

Applications

Perkadox® GB-50X is a non-caking, fine, granular powder with excellent free flowing properties containing 50% dibenzoyl peroxide. Perkadox® GB-50X is used for the curing of unsaturated polyester resins and (meth)acrylic resins at ambient and elevated temperatures. At temperatures up to 80°C, Perkadox® GB-50X should be used in combination with an aromatic tertiary amine accelerator. Above 80°C the use of an accelerator is not required. Perkadox® GB-50X is easy to handle, easy to disperse and dissolves very quickly in unsaturated polyester resins and (meth)acrylic resins. Perkadox® GB-50X does not dissolve clearly in the resin system and is therefore not applicable for the production of cured parts when a high degree of transparency is required. For these applications, Perkadox® GB-50L is advised.

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-50X will remain within the Nouryon specifications for a period of at least 12 months after delivery. On rare occasions, the product might undergo agglomeration during transportation and/or storage. If that happens, the lumps can be broken by gently massaging the bag of product. Agglomeration may be worse when the product is stored or transported at temperatures above Ts max. (25°C). |

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-50X 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-50X 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-50X. 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.

Perkadox® is a registered trademark of Nouryon Functional Chemicals B.V. or affiliates in one or more territories.

Contact Us

Polymer Specialties Americas
polymer.amer@nouryon.com

Polymer Specialties Europe, Middle East, India and Africa
polymer.emeia@nouryon.com

Polymer Specialties Asia Pacific
polymer.apac@nouryon.com

The Nouryon logo consists of a stylized blue 'N' followed by the word 'ouryon' in a lowercase, sans-serif blue font.