

Perkadox L-40 RPS

Dibenzoyl peroxide

Perkadox L-40 RPS is a special peroxide formulation containing 40% benzoyl peroxide which disperses and dissolves very quickly in pure unsaturated polyester and acrylic resins. The product is specially developed for curing road-marking acrylic coatings and fits high-pressure machines presently used in road marking. The product carries the approval from leading spraying-machine equipment manufacturer in Germany. It has excellent storage stability. The fine particle size allows for fast dissolving.

CAS number 94-36-0, 78-40-0

TSCA status
listed on inventory

EINECS/ELINCS No. 202-327-6; 201-114-5

Molecular weight 242.2

Specifications

Appearance	White suspension
Assay	39 - 41 %

Characteristics

Density, 20 °C	1.175 g/cm ³
Viscosity, 20 °C	400-500 (Ericksen) mPa.s

Applications

Perkadox L-40 RPS is a pumpable, sprayable easy dispersing form of dibenzoyl peroxide for the curing of unsaturated polyester resins at ambient and elevated temperatures. At cure-temperatures up to 80°C, Perkadox L-40 RPS should be used in combination with an aromatic tertiary amine accelerator, above 80°C the use of an accelerator is not required. Perkadox L-40 RPS can be pumped through internal and external mix FRP spray equipment and poured or metered by volume, Perkadox L-40 RPS is easier to use and handle than conventional dibenzoyl peroxide pastes or dispersions. The low water content of Perkadox L-40 RPS allows for use in all FRP applications.

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
Emergency temperature (T_e)	45°C
Control temperature (Tc)	40°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 L-40 RPS will remain within the Nouryon 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 20 kg peroxide formulation. Both packaging and transport meet the international regulations. For the availability of other packed quantities consult your Nouryon representative. Perkadox L-40 RPS is classified as Organic peroxide type F, liquid, Division 5. 2; UN 3109.

Safety and handling

Keep containers tightly closed. Store and handle Perkadox L-40 RPS 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 L-40 RPS. 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, 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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Thermoset composites