

# Perkadox 14-40B-PD

Di(tert-butylperoxyisopropyl) benzene

Perkadox 14-40B-PD is a 40% formulation on an inert carrier system in powder form.

CAS number EINECS/ELINCS No. 2212-81-9, 25155-25-3 218-664-7

TSCA status Molecular weight listed on inventory 338.5

Active oxygen content Concentration peroxide 3.7-3.9% 9.45%

## **Specifications**

Appearance	Off-white powder
Assay	39.0-41.0 %

#### **Applications**

Perkadox 14-40B-PD is a bifunctional peroxide which is used for the crosslinking of natural rubber and synthetic rubbers, as well as polyolefins. Rubber compounds containing Perkadox 14-40B-PD have excellent scorch safety, and under certain conditions one step mixing is possible. Safe processing temperature: 135°C (rheometer ts2 > 20 min.). Typical crosslinking temperature: 175°C (rheometer t90 about 12 min.)

#### 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	80°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 the recommended storage conditions, Perkadox 14-40B-PD will remain within the Nouryon specifications for a period of at least 6 months after delivery.

#### Packaging and transport

The standard packaging is a cardboard box for 50 lbs peroxide formulation. Both packaging and transport meet the international regulations. For the availability of other packed quantities consult your Nouryon representative. Perkadox 14-40B-PD is classified as Flammable solid, class 4. 1, UN 1325.

### Safety and handling

Keep containers tightly closed. Store and handle Perkadox 14-40B-PD 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, alkalines 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 14-40B-PD. This information should be thoroughly reviewed prior to acceptance of this product. The SDS is available at nouryon.com/sds-search.

#### Major decomposition products

Methane, Acetone, tert-Butanol, Di(2-hydroxyisopropyl)benzene, Diacetylbenzene, Acetyl 2-hydroxyisopropyl benzene

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#### Contact Us

Polymer Catalysts Americas

polymer.amer@nouryon.com

Polymer Catalysts Europe, Middle East, India and Africa

polymer.emeia@nouryon.com

Polymer Catalysts Asia Pacific

polymer.apac@nouryon.com

