

# **Trigonox 249**

Methyl ethyl ketone peroxide and cumyl hydroperoxide, solution in dimethyl phthalate

Trigonox® 249 is a peroxide blend specially developed for curing unsaturated polyester and vinylester resins at ambient conditions in conjunction with a metal accelerator. Trigonox® 249 can also be solely applied for the curing of UP resins at elevated temperatures

CAS number 1338-23-4, 80-15-9

TSCA status
listed on inventory

EINECS/ELINCS No. 215-661-2; 201-254-7

# **Specifications**

Active oxygen	8.2-8.7 %
Appearance	Clear liquid
Viscosity (dynamic)	24.9 mPa.s
Viscosity (kinematic)	24.8 mm <sup>2</sup> /s

#### Characteristics

Density, 20 °C	1.14 g/cm <sup>3</sup>
Viscosity, 20 °C	24.8 mPa.s

#### **Applications**

Trigonox® 249 is a peroxide blend specially developed for curing unsaturated polyester and vinylester resins at ambient conditions in conjunction with a metal salt. Trigonox® 249 can also be solely applied for the curing of UP resins at elevated temperatures. Trigonox® 249 produces lower exotherms than standard MEKP's and is useful in warm and hot weather climates. Applications include cast polymer and laminates.

#### 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	60°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 Geneval

### 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 the recommended storage conditions, Trigonox® 249 will remain
	within the Nouryon specifications for a period of at least 3 months after delivery.

## Packaging and transport

The standard packaging is a 25 l HDPE can (Nourytainer®) for 25 kg peroxide solution. Both packaging and transport meet the international regulations. For the availability of other packed quantities contact your Nouryon representative. Trigonox® 249 is classified as Organic peroxide type D; liquid, Division 5.2; UN 3105.

## Safety and handling

Keep containers tightly closed. Store and handle Trigonox® 249 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 Trigonox® 249. 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, Water, Acetic acid, Formic acid, Propionic acid, Methyl ethyl ketone, Acetophenone, 2-Phenylisopropanol, Methane

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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