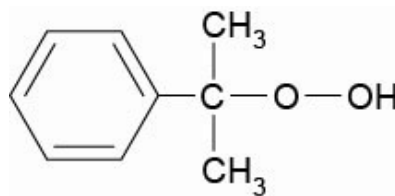


Trigonox 239

Cumyl hydroperoxide



Trigonox 239 is a peroxide mixture based on cumyl hydroperoxide, specially developed for curing vinylester resins in combination with a cobalt accelerator.

CAS number
80-15-9

EINECS/ELINCS No.
210-254-7

TSCA status
listed on inventory

Molecular weight
152.2

Specifications

Appearance	Clear liquid
Assay	43.0-45.0 %
Color	≤ 250 Pt-Co

Characteristics

Density, 20 °C	1.040 g/cm ³
Viscosity, 20 °C	5 mPa.s

Applications

Trigonox 239 is a peroxide mixture based on cumene hydroperoxide. Trigonox 239 is especially developed for the cure of vinylester or phenacryl resins in combination with a cobalt accelerator. Trigonox 239 can successfully be used instead of generally applied keton peroxides like Butanox LPT with the following features: no 'gassing' after the peroxide is mixed in the preaccelerated vinylester resin. This phenomenon is very often recognized as a disadvantage of ketone peroxides in vinylester resins. The use of an amine accelerator is in general not necessary to achieve a good cure, a fast cure in thin coatings and laminates up to a thickness of approx. 6 mm and a low peak exotherm in thick 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	55°C (131°F)
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.	25°C (77°F)
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Note	When stored under the recommended storage conditions, Trigonox 239 will remain within the Nouryon specifications for a period of at least 9 months after delivery.
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Packaging and transport

Trigonox 239 is packed in non-returnable polyethylene containers of 7 lb net weight (4 per case). Both packaging and transport meet the international regulations. For the availability of other packed quantities contact your Nouryon representative. Trigonox 239 is classified as Organic peroxide type F; liquid, Division 5. 2; UN 3109.

Safety and handling

Keep containers tightly closed. Store and handle Trigonox 239 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 239. This information should be thoroughly reviewed prior to acceptance of this product. The SDS is available at <https://polymerchemistry.nouryon.com>.

Major decomposition products

Acetophenone, phenylisopropanol, methane, water

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