

Trigonox 239C

Promoted mixture of cumyl hydroperoxide and tert-butyl peroxybenzoate

Trigonox® 239C is a peroxide mixture based on cumyl hydroperoxide, tert-butyl peroxybenzoate and Promotor, especially developed to improve the efficiency curing of vinylester resins in combination with a cobalt accelerator.

CAS number 80-15-9; 614-45-9

TSCA status listed on inventory EINECS/ELINCS No. 210-254-7; 210-382-2

Specifications

Active oxygen	5.0 %
Appearance	Clear liquid
Color	light yellow
Characteristics	
Density, 20 °C	1.042 g/cm ³
Viscosity, 20 °C	5 mPa.s

Applications

Trigonox® 239C is a peroxide mixture based on promoted cumene hydroperoxide and tert-butyl peroxybenzoate. Trigonox® 239C is especially developed to improve the cure efficiency of vinylester resins in combination with a cobalt accelerator at elevated temperatures. An application of use can be filament winding. In this application Trigonox® 239C can successfully be used instead of generally peroxides like Trigonox® 239 and Butanox LPT-IN with the features of no gassing and an improved cure efficiency.

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 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
Ts Min.	-25°C
Note	When stored under the recommended storage conditions, Trigonox® 239C will remain within the Nouryon specifications for a period of at least 3 months after delivery.

Packaging and transport

Trigonox® 239C is packed in a 30-liter HDPE can (Nourytainer®) for 25 kg peroxide. Both packaging and transport meet the international regulations. For the availability of other packed quantities contact your Nouryon representative. Trigonox® 239C is classified as Organic peroxide type F; liquid, Division 5. 2; UN 3109.

Safety and handling

Keep containers tightly closed. Store and handle Trigonox® 239C 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® 239C. This information should be thoroughly reviewed prior to acceptance of this product. The SDS is available at nouryon.com/sds-search.

Major decomposition products

Acetophenone, phenylisopropanol, methane, water, Carbon dioxide, Acetone, Methane, tert-Butanol, Benzoic acid, Benzene

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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