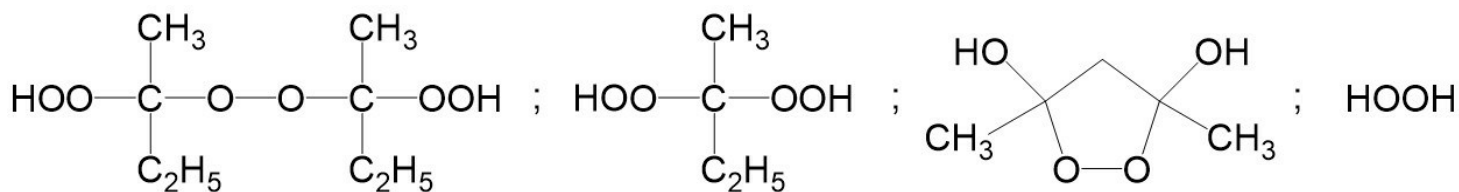


Trigonox 61

Mixture of methyl ethyl ketone peroxide and acetylacetone peroxide in solvents



Trigonox® 61 is an organic peroxide mixture suitable for applications where a shorter demoulding time is required. Faster speed of cure than Butanox® M-50, though the high cure rates of Trigonox® 44B are not attainable.

CAS number
1338-23-4

EINECS/ELINCS No.
700-954-4

TSCA status
listed on inventory

Specifications

Appearance	Clear liquid
Color	50 Pt-Co max.
Total active oxygen	7.7-7.9 %

Characteristics

Density, 20°C / 68°F	1.130 g/cm ³
Viscosity, 20°C	23 mPa.s

Applications

Trigonox® 61 is an organic peroxide mixture with methyl ethyl ketone peroxide and acetylacetone peroxide for the curing of unsaturated polyester resins in the presence of a cobalt accelerator at room and elevated temperatures. With the curing system Trigonox® 61/cobalt accelerator a faster speed of cure can be obtained than with Butanox® M-50; however, the high cure rates achieved with Trigonox® 44B are not attainable. The gel times with Trigonox® 61 are in general similar to those with Butanox® M-50. The curing system Trigonox® 61/cobalt accelerator is particularly suitable for the curing of gelcoat resins, laminating resins and for applications where a shorter demoulding time than obtained with Butanox® M-50 is required. Moreover the manufacture of light resistant parts may be possible contrary to the curing system benzoyl peroxide/amine accelerator.

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
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
Ts min.	-10°C to prevent crystallization
Note	When stored under the recommended storage conditions, Trigonox® 61 will remain within the Nouryon specifications for a period of at least 3 months after delivery.

Packaging and transport

The standard packaging is a 30-liter HDPE can (Nouryainer®) 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® 61 is classified as Organic peroxide type D; liquid, Division 5.2; UN 3105.

Safety and handling

Keep containers tightly closed. Store and handle Trigonox® 61 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® 61. 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, methyl ethyl ketone, acetylacetone, mixture of aliphatic acids

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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Contact Us

Polymer Specialties Americas
polymer.amer@nouryon.com

Polymer Specialties Europe, Middle East, India and Africa
polymer.emeia@nouryon.com

Polymer Specialties Asia Pacific
polymer.apac@nouryon.com

Nouryon

