

Trigonox 44K

Acetylacetone peroxide and tert-butyl peroxybenzoate, in solvent mixture

Trigonox 44K is a highly reactive & efficient cure system for ambient to elevated temperature curing of promoted unsaturated polyester & acrylic modified thermoset resins. Phthalate-free initiator blend used to drive fast and complete cure where fast exotherm can be accepted.

CAS number
37187-22-7; 614-45-9

EINECS/ELINCS No.
253-384-9; 210-382-2

TSCA status
listed on inventory

Specifications

Appearance, 20-30°C	Clear liquid
Total active oxygen	3.41-3.63 %

Characteristics

Density, 20 °C	1.03 g/cm ³
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Applications

Trigonox 44K is a phthalate-free blended initiator used for the curing of unsaturated polyester and acrylic thermoset resins at ambient conditions in conjunction with metal salts. Trigonox 44K provides for effective through-cure and lower residual monomer contents in applications such as panels and laminates. Additional end-use information is available in various application guides or directly from Nouryon representative.

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 (140°F)
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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 (86°F)
Ts Min.	-10°C (14°F)
Note	When stored under these recommended storage conditions, Trigonox 44K will remain within the Nouryon specifications for a period of at least 3 months after delivery.

Packaging and transport

Trigonox 44K is packed in non-returnable, one gallon polyethylene containers of 8 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 44K is classified as Organic peroxide type D; liquid; Division 5.2; UN 3105.

Safety and handling

Keep containers tightly closed. Store and handle Trigonox 44K 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 44K. 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, Acetyl acetone, Aliphatic acids, Water, 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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The Nouryon logo consists of a stylized orange 'N' followed by the word 'ouryon' in a lowercase, sans-serif font, all in orange.