

# Trigonox 161-C65

1,1-Di(tert-butylperoxy)cyclohexane and tert-Butyl peroxy-2ethylhexanoate, 65% solution in odorless mineral spirits

Trigonox 161-C65 is an initiator (65% active ingredient in odorless mineral spirits) used for curing unsaturated polyester, vinylester and acrylic thermosetting resins in the temperature range of 80-125°C.

CAS number EINECS/ELINCS No. 3006-86-8, 3006-82-4 221-111-2; 221-110-7

TSCA status Molecular weight listed on inventory 260.4; 216.3

Active oxygen content peroxide 12.29%; 7.40%

## **Specifications**

Active oxygen	6.64 -6.85 %
Appearance, 20-25°C	Clear and colorless liquid
Hydroperoxides as TBHP	≤ 0.1 %

#### Characteristics

Density, 25 °C	0.893 g/cm <sup>3</sup>

#### **Applications**

Trigonox 161-C65 is suitable for use in curing unsaturated polyester, vinyl ester and acrylic thermosetting resins in the temperature range of 80-125°C. Trigonox 161-C65 is a convenient pre-blended initiator for a variety of applications including pultrusion and molding compounds.

## 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	40°C (104°F)
Emergency temperature (T <sub>e</sub> )	35°C (95°F)
Control temperature (Tc)	30°C (86°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.) for each organic peroxide product.

Ts Max.	10°C
Ts Min.	-30°C
Note	When stored under the recommended storage conditions, Trigonox 161-C65 will remain within the Nouryon specifications for a period of at least 3 months after delivery.

#### Packaging and transport

Trigonox 161-C65 is packed in non-returnable 1 gallon polyethylene containers of 7 lb net weight (4 per case) and in non-returnable 5 gallon polyethylene containers of 35 lb weight. Both packaging and transport meet the international regulations. For the availability of other packed quantities contact your Nouryon representative. Trigonox 161-C65 is classified as Organic peroxide type C; liquid, temperature controlled; Division 5.2; UN 3113.

#### Safety and handling

Keep containers tightly closed. Store and handle Trigonox 161-C65 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 161-C65. This information should be thoroughly reviewed prior to acceptance of this product. The MSDS is available at nouryon.com/sds-search.

#### Major decomposition products

Carbon dioxide, tert-Butanol, Heptane, 3-tert-Butoxy heptane, Methane, Acetone, Hexanoic acid

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.

Trigonox is a registered trademark of Nouryon Functional Chemicals B.V. or affiliates in one or more territories.

# Contact Us

Polymer Catalysts Americas

polymer.amer@nouryon.com

Polymer Catalysts Europe, Middle East, India and Africa

polymer.emeia@nouryon.com

Polymer Catalysts Asia Pacific

polymer.apac@nouryon.com

© 2021

