



# **Trigonox 279**

Mixture of acetylacetone peroxide and tert-butyl peroxybenzoate in solvents

$$HO$$
 OH  $CH_3$   $CH_3$   $CH_3$   $CH_3$   $CH_3$ 

Trigonox® 279 is a fast peroxide blend for the cure of unsaturated polyester resins at elevated temperatures in combination with a cobalt accelerator.

CAS number EINECS/ELINCS No. 614-45-9, 37187-22-7 210-382-2; 253-384-9

TSCA status
listed on inventory

# **Specifications**

Appearance	Clear liquid
Color	100 Pt-Co / APHA max.
Total active oxygen	4.3-4.7 %

### Characteristics

Density, 20 °C 1.054 g/cm <sup>3</sup>
--

# **Applications**

Trigonox® 279 is a peroxide formulation based on acetylacetone peroxide and tert butyl peroxybenzoate. Trigonox® 279 has specially been developed for the cure of unsaturated polyester resins at elevated temperatures in combination with a cobalt accelerator (e.g. Accelerator NL-49 PN = 1% cobalt). Application area for the cure system Trigonox® 279 plus a cobalt accelerator can be e.g. continuous laminating, resin transfer moulding, filament winding and centrifugal casting.

#### 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)
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 (77°F)
Ts Min.	-5°C (23°F)
Note	When stored under the recommended storage conditions, Trigonox® 279 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 (Nourytainer®) 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® 279 is classified as Organic peroxide type E, liquid; Division 5.2; UN 3107.

# Safety and handling

Keep containers tightly closed. Store and handle Trigonox® 279 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® 279. 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, Benzoic acid, tert-Butanol, Acetone, Benzene, Methane, Ethane, Diphenyl, Acetylacetone, Aliphatic acids, 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.

Trigonox® and Nourytainer are registered trademarks of Nouryon Functional Chemicals B.V. or affiliates in one or more territories.

#### 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

