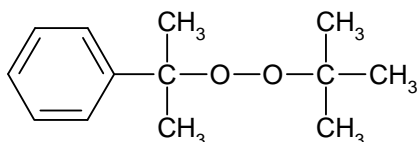




Trigonox[®] T

Product description tert-Butyl cumyl peroxide



Molecular weight	: 208.3
Active oxygen content peroxide	: 7.68%
actual product	: 7.22-7.45%
CAS No.	: 3457-61-2
EINECS/ELINCS No.	: 222-389-8
TSCA status	: listed on inventory

Trigonox T is a monofunctional peroxide which is used for the crosslinking of natural and synthetic rubbers, as well as thermoplastic polyolefins.

Specifications	Appearance	: Clear liquid
	Assay	: 94.0-97.0%
	Hydroperoxides as TBHP	: 0.5% max.
	Water	: 0.05% max

Characteristics	Density, 20°C	: 0.940 g/cm ³
	Freezing point	: 16°C (61°F)

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, AkzoNobel recommends a maximum storage temperature (T_s max.) for each organic peroxide product.

For *Trigonox T* T_s max. = 40°C (104°F)

When stored under the recommended storage conditions, *Trigonox T* will remain within the AkzoNobel specifications for a period of at least six months after delivery.

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.

For *Trigonox T* SADT : 80°C (176°F)

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).

Major decomposition products Acetone, Methane, tert-Butanol, Acetophenone, 2-Phenylpropanol-2

Packaging and transport

In North America *Trigonox T* is packed in non-returnable, five gallon polyethylene containers of 30 lb net weight and steel drums of 396 lb net weight.

In other regions the standard packaging is a 30-liter HDPE can (Nourytainer[®]) for 25 kg peroxide formulation and a 180 kg HDPE drum.

Both packaging and transport meet the international regulations. For the availability of other packed quantities contact your AkzoNobel representative.

Trigonox T is classified as Organic peroxide type E; liquid, Division 5.2; UN 3107.

Safety and handling

Keep containers tightly closed. Store and handle *Trigonox T* 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).

If crystallization occurs, *Trigonox T* may be melted by indirect heating only. A water bath with a temperature of 30°C max. is recommended. The residence time of the melted peroxide in the water bath must not exceed 48 hours.

Please refer to the Material Safety Data Sheet (MSDS) for detailed information on the safe storage, use and handling of *Trigonox T*. This information should be thoroughly reviewed prior to acceptance of this product.

The MSDS is available at www.akzonobel.com/polymer.

Applications

Trigonox T is used for the crosslinking of natural and synthetic rubbers, as well as thermoplastic polyolefins.

- Rubber compounds containing *Trigonox T* have excellent scorch safety.
- Safe processing temperature: 135°C (rheometer $t_{s2} > 20$ minutes).
- Typical crosslinking temperature: 175°C (rheometer t_{90} about 12 minutes).
- One of the decomposition products of *Trigonox T* has a distinct sweet smell.

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