

Trigonox 178 VR

Methyl ethyl ketone peroxide and cumyl hydroperoxide solution in 2,2,4-trimethyl-1,3-pentanediol diisobutanoate

Slower reactivity MEKP/CHP blend with vanishing red cure indicator for curing promoted unsaturated polyester matrices at room temperature used to suppress exotherm in thick or hot parts.

CAS number
1338-23-4; 80-15-9

EINECS/ELINCS No.
215-661-2; 201-254-7

TSCA status
listed on inventory

Specifications

Active oxygen	9.0%
---------------	------

Characteristics

Appearance, 20-25 °C	Clear liquid
----------------------	--------------

Applications

Trigonox® 178 VR is a convenient pre-blended initiator suitable for curing unsaturated polyester, vinyl ester and acrylic thermosetting resins at ambient conditions in conjunction with a metal salt. Trigonox® 178 VR produces lower exotherms than standard MEKP's and is useful in warm and hot weather climates. Applications include cast polymer and laminates. Trigonox® 178 VR offers all the advantages of a red MEKP, except red parts. The vanishing red (VR) series of products includes a red indicator system that virtually disappears during cure. The red is there when you need it, but not in the finished product.

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
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
Note	When stored under these recommended storage conditions Trigonox® 178 VR will remain within the Nouryon specifications for a period of at least 3 months after delivery.

Packaging and transport

Trigonox® 178 VR 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® 178 VR is classified as Organic peroxide type D; liquid; Division 5.2; UN 3105; PG II.

Safety and handling

Keep away from open fire, sparks and other sources of heat or ignition. 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® 178 VR. 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, Acetic acid, Formic acid, Propionic acid, Methyl ethyl ketone, Acetophenone, 2-Phenylisopropanol, Methane

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 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

The Nouryon logo consists of a stylized blue 'N' followed by the word 'ouryon' in a lowercase, sans-serif font. The 'N' is significantly larger and more prominent than the rest of the text.