

PEROXAN BIC

Peroxyester / Curing

Description

tert-Butyl peroxyisopropylcarbonate 75%, Solution in odorless white spirits

PEROXAN BIC is used for the curing of unsaturated polyester resins.

 Molecular weight:
 176.2

 CAS No.:
 2372-21-6

Technical data Appearance: clear liquid

Peroxide assay: appx. 75%
Active oxygen assay: appx. 6.81%
Density at 20°C: 0.88 g/cm³

Solubility Insoluble in water, soluble in various aliphatic and aromatic solvents

Storage Maximum storage temperature (Ts max): 25°C

Minimum storage temperature (Ts min): 0°C

Storage stability as from date of delivery: 6 months

Hazardous reactions Keep packaging tightly closed in a well ventilated place at indicated storage temperature. Keep away from

reducing agents e.g. amines, acids, alkalis, heavy metal compounds (e.g. accelerators, driers, metal soaps).

Never weigh out in storage room.

Oxidizing agent. Decomposes violently under the influence of heat or by contact with reducing agent. Never mix with accelerators.

Organic Peroxides are more or less stable products but will decompose under the influence of heat. To minimize a loss of quality during storage, it is important that the recommended maximum storage temperature is not exceeded. If a minimum storage temperature is given, an undesirable process such as a solidification or phase

separation, is known to occur below this temperature.

Safety characteristics Flash point: 50°C

SADT: 60°C

The SADT (Self Accelerating Decomposition Temperature) is the lowest temperature at which a self accelerating decomposition may occur.



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Application

PEROXAN BIC is used for the curing of unsaturated polyester resins at high temperatures.

PEROXAN BIC is preferred for the curing of UP resin based hot press moulding formulations in the temperature range from 140° to 160°C.

PEROXAN BIC gives a long shelf life stability of the compound.

PEROXAN BIC - in comparison with PEROXAN PB, tert-Butyl peroxybenzoate, - can be caracterized as a faster and more efficient peroxide. This means a faster and more optimal cure with a lower residual monomer content of the moulded part.

The decomposition products of PEROXAN BIC are low volatile compounds, which make the peroxide very suitable for production of e.g. microwave cookware.

Depending on application and working conditions, the following peroxide and when applicable cobalt accelerator dosage levels are recommended:

PEROXAN BIC: 1,0 to 2,0 phr

Packaging

25kg container

Major decomposition products

Acetone, isopropanol, Carbon dioxide, Methane, tert-Butanol

Safety and handling

Please refer to the material safety data sheet (MSDS) for information concerning safe storage, use and handling of PEROXAN BIC. This information should be thoroughly reviewed prior to acceptance of this product. The MSDS is available for downloading at www.pergan.com or through contacting Pergan directly.

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