

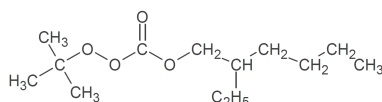
PEROXAN BEC

Peroxyester / Crosslinking

Description

tert-Butyl peroxy 2-ethylhexyl carbonate
97%, Liquid

PEROXAN BEC is used for the crosslinking of EPDM, EPM, NBR and EVA (Ethyl Vinyl Acetate).



Molecular weight:
CAS No.:

246.3
34443-12-4

Technical data

Appearance: **clear liquid**
Peroxide assay: **min. 97%**
Active oxygen assay: **min. 6.3%**
Density at 20°C: **0.93 g/cm³**

Half life time

in an EPDM compound:

t _{1/2}	10h	1h	0,1h
bei	98°C	117°C	154°C

Solubility

Insoluble in water, soluble in phthalates

Storage

Maximum storage temperature (Ts max): **30°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: **>SADT°C**
SADT: **60°C**

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

PEROXAN BEC

Peroxyester / Crosslinking

Application

Crosslinking of EPDM, EPM, NBR:
PEROXAN BEC is used for crosslinking of elastomers.

Safe processing temperature (t₂): 120°C
Typical crosslinking temperature (t₉₀): 150 to 180°C
Dosing: 1-5 phr*
* depending on elastomer and degree of crosslinking

Crosslinking of EVA (Ethyl Vinyl Acetate):
PEROXAN BEC is especially used for EVA encapsulated (crosslinkable) sheets for photovoltaic products (solar panel manufacture) .

Safe processing temperature (t₂): 120°C (at 160°C Typical crosslinking temperature (t₉₀): 160 to 180°C
Dosing: 1,5-2 phr*
* depending on elastomer and degree of crosslinking

The safe processing temperature t₂ is defined as the temperature, at which the scorch time is longer than 20 minutes.

The typical crosslinking temperature t₉₀ is defined as the temperature at which 90% of the crosslinks in the compound are formed within about 12 minutes.

Packaging

25kg container

Major decomposition products

2-Ethylhexanol, Carbon dioxide, tert-Butanol

Safety and handling

Please refer to the material safety data sheet (MSDS) for information concerning safe storage, use and handling of PEROXAN BEC. 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.

The information presented herein is true and accurate and to the best of our knowledge, but without any guarantee. Since the conditions of use are beyond our control we disclaim any liability, including for patent infringement, incurred in connection with the use of these products, data or suggestions.