

# PEROXAN PA-50

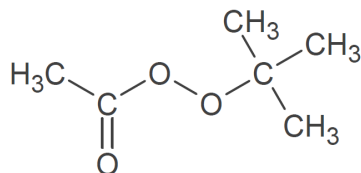
## Peroxyester / Polymerization

### Description

tert-Butyl peroxyacetate

50%, Solution in odorless white spirits

PEROXAN PA-50 is used for the (co)polymerization of ethylene, styrene, acrylonitrile, acrylates and methacrylates.



Molecular weight:

**132.2**

CAS No.:

**107-71-1**

### Technical data

Appearance:

**clear liquid**

Peroxide assay:

**appx. 50%**

Active oxygen assay:

**appx. 6.05%**

Density at 20°C:

**0.82 g/cm<sup>3</sup>**

### Half life time

in chlorobenzene:

$t_{1/2}$	10h	1h	1min
bei	<b>100°C</b>	<b>119°C</b>	<b>157°C</b>

### Storage

Maximum storage temperature (Ts max):

**10°C**

Minimum storage temperature (Ts min):

**-15°C**

Storage stability as from date of delivery:

**6 months**

### Hazardous reactions

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

SADT:

**70°C**

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

# PEROXAN PA-50

## Peroxyester / Polymerization

---

### Application

Polymerization of ethylene:

PEROXAN PA-50 is used for high pressure polymerization of ethylene in both autoclave and tubular processes, usually in combination with other peroxides of varying degrees of activity.

Temperature range: 215 to 250°C

Light-off temperature at 2300 bar: 220°C

Polymerization of styrene:

PEROXAN PA-50 may be used in polymerization and copolymerization of styrene.

In a mass process PEROXAN PA-50 can be used to increase polymerization rates.

In suspension polymerization processes, PEROXAN PA-50 is often used for reduction of residual styrene content during the final polymerization stage.

Temperature range: 100 to 130°C

Dosing: 0,02 to 0,1 phr

Polymerization of acrylates and methacrylates:

PEROXAN PA-50 can be used as initiator for the solution, bulk and suspension (co)polymerization of acrylates and methacrylates.

Temperature range: 100 to 170°C

Dosing: 1 to 3 phr

Other applications:

PEROXAN PA-50 may also be used for the copolymerization of acrylonitrile.

### Packaging

**20kg container**

### Major decomposition products

**2-Methoxy-2-methylpropane, Acetone, 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 PA-50. This information should be thoroughly reviewed prior to acceptance of this product. The MSDS is available for downloading at [www.pergan.com](http://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.