

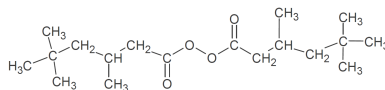
# PEROXAN NPO-50

## Diacyl peroxides / Polymerization

### Description

Di-(3,5,5-trimethylhexanoyl)-peroxide  
50%, Solution in odorless white spirits

PEROXAN NPO-50 is used for the (co)polymerization of ethylene, vinylchloride, vinylidenechloride.



Molecular weight:

**314.5**

CAS No.:

**3851-87-4**

### Technical data

Appearance:

**clear liquid**

Peroxide assay:

**appx. 50%**

Active oxygen assay:

**appx. 2.55%**

Density at 0°C:

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

### Half life time

in chlorobenzene:

t <sub>1/2</sub>	10h	1h	1min
bei	<b>59°C</b>	<b>77°C</b>	<b>112°C</b>

### Storage

Maximum storage temperature (Ts max):

**5°C**

Minimum storage temperature (Ts min):

**-8°C** to prevent crystallization

Storage stability as from date of delivery:

**3 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:

**25°C**

SADT in IBC:

**25°C**

Emergency temperature:

**15°C**

Emergency temperature in

**15°C**

Control temperature:

**10°C**

IBC:

**10°C**

Control temperature in IBC:

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

The emergency temperature is derived from the SADT. It is the temperature at which emergency actions have to be taken. The control temperature is the maximum temperature at which the product can be transported safely.

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### Application

Polymerization of ethylene:

PEROXAN NPO-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: 150 to 190°C

Light-off temperature at 2300 bar: 165°C

Polymerization of vinylchloride:

PEROXAN NPO-50 may be used in the suspension polymerization of vinylchloride.

Temperature range: 50 to 70°C

Dosing: 0,2 to 0,6 phr

Other applications:

PEROXAN NPO-50 may also be used for the (co)polymerization of vinylidenchloride.

### Packaging

**25kg container**

**900kg IBC**

Bulk delivery of PEROXAN NPO-50 in a 1,25 m<sup>3</sup> stainless steel intermediate bulk container (IBC) is possible in a number of countries.

### Major decomposition products

**2,2,4,7,9,9-Hexamethyldecane, 2,4,4-Trimethylpentane, Carbon dioxide**

### Safety and handling

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

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