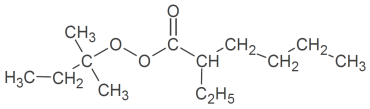
# PEROXAN APO

## Peroxyester / Polymerization

**Description**

tert-Amyl peroxy-2-ethylhexanoate
95%, Liquid

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



| | |
|---|---|
| Molecular weight: | **230.4** |
| CAS No.: | **686-31-7** |

**Technical data**

| | |
|---|---|
| Appearance: | **clear liquid** |
| Peroxide assay: | **min. 95%** |
| Active oxygen assay: | **min. 6.6%** |
| Density at 20°C: | **0.9 g/cm³** |

**Half life time**

in chlorobenzene:

| $t_{½}$ | 10h | 1h | 1min |
|---|---|---|---|
| bei | **73°C** | **91°C** | **128°C** |

**Storage**

| | |
|---|---|
| Maximum storage temperature (Ts max): | **5°C** |
| 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: | 35°C |
| Emergency temperature: | 25°C |
| Control temperature: | 20°C |

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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# PEROXAN APO

## Peroxyester / Polymerization

| | |
|---|---|
| **Application** | Polymerization of ethylene:<br>PEROXAN APO 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.<br><br>Temperature range: 160 to 210°C<br>Light-off temperature at 2300 bar: 184°C<br><br>Polymerization of styrene:<br>PEROXAN APO may be used in polymerization and copolymarization of styrene.<br><br>Temperature range: 80 to 110°C<br>Dosing: 0,1 to 0,5 phr<br><br>Polymerization of acrylates and methacrylates:<br>PEROXAN APO can be used as initiator for the solution, bulk and suspension (co)polymerization of acrylates and methacrylates.<br><br>Temperature range (solution polym.): 70 to 120°C<br>Dosing: 0,1 to 1 phr<br><br>Other applications:<br>PEROXAN APO may also be used for the (co)polymerization of acrylonitrile. |
| **Packaging** | **25kg container** |
| **Major decomposition products** | **3-(1,1-Dimethylpropoxy)heptane, Acetone, Ethane, Heptane, Carbon dioxide, Methane, tert Amyl-alcohol** |
| **Safety and handling** | Please refer to the material safety data sheet (MSDS) for information concerning safe storage, use and handling of PEROXAN APO. 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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