**TAPPI-75-AL**

**tert. Amylperoxypivalate**  
CAS#29240-17-3  
75%, Solution in aliphatics  
Molar mass: 188.2 g/mol

**Structural Formula**

![Structural formula of tert. Amylperoxypivalate]

**Description**

Colourless, mobile liquid, consisting of 75% tert.Amylperoxypivalate, desensitized with high boiling aliphatic hydrocarbons. This branched, aliphatic perester is used as an initiator (radical source) for the polymerisation of monomers, e.g. ethylene.

**Technical Data**

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>colourless, mobile liquid</td>
</tr>
<tr>
<td>Peroxide content</td>
<td>approx. 75 % w/w</td>
</tr>
<tr>
<td>Active oxygen</td>
<td>approx. 6.37 % w/w</td>
</tr>
<tr>
<td>De-sensitising agent</td>
<td>aliphatics (b.p. &gt;170 °C)</td>
</tr>
<tr>
<td>Density at 20 °C</td>
<td>approx. 0.86 g/cm³</td>
</tr>
<tr>
<td>Viscosity at 20 °C</td>
<td>approx. 2 mPas</td>
</tr>
<tr>
<td>Refractive index at 20 °C</td>
<td>approx. 1.419</td>
</tr>
<tr>
<td>Critical temperature (SADT)</td>
<td>approx. 25 °C</td>
</tr>
<tr>
<td>Cold storage stability</td>
<td>liquid to below -25 °C</td>
</tr>
<tr>
<td>Recommended storage temperature</td>
<td>below -5 °C</td>
</tr>
<tr>
<td>Maximum transport temperature</td>
<td>10 °C</td>
</tr>
<tr>
<td>Storage stability (activity) as from date of delivery</td>
<td>3 months</td>
</tr>
</tbody>
</table>

This product is in compliance with the ElektroG (E U-Directives: RoHS 2002/95/EG, WEEE 2002/96/EG)

**Half-life-time**

10 h/1 h/1 min (0.1 m/benzene): 53/71/110 °C
Technical Data Sheet

Application

**ETHYLENE:**
Initiator for the high pressure polymerisation of ethylene and for the copolymerisation of ethylene and vinyl acetate in combination with thermally more stable peroxides.

Temperature range: 130-190°C.

Particular advantages: liquid even at low temperatures and high pressures. Thus, dosing and metering also in supply form is possible without any dilution.

No crystallisation within the high-pressure pumps will occur.

More active than tert. Butylperoxyvalerate, therefore less specific consumption of initiator and lower starting temperatures possible.

Less branching of the side chains.

**OTHER MONOMERS:**
Initiator for the polymerisation in mass, suspension or solution of (meth-)acryl- or other vinyl monomers, possibly in combination with thermally more stable peroxides, in order to reduce the residual monomer content in the polymer.

Temperature range: 50-80°C.

Usage level: 0.04-0.1% as supplied.

Further information on suitable initiators for the polymerisation of monomers is given in our application brochures on this subject.

Standard Packaging

25kg in HDPE canister

Disclaimer

This information and all further technical advice are reflecting our present knowledge and experience based on internal tests with local raw materials with the purpose to inform about our products and applications. The information should not be construed as guaranteeing specific properties of products described or their suitability for a particular application, nor as providing complete instructions for use. The information implies no guarantee for product and shelf life properties, nor any liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. We reserve the right to make any changes according to technological progress or further developments.

Application and usage of our products based on our technical advice is out of our control and sole responsibility of the user. The user is not released from the obligation to conduct careful inspection and testing of incoming goods in order to verify the suitability for the intended application.

United Initiators
EU
T: +49 89 74422 237
F: +49 89 74422 6237
cs-initiators.eu@united-in.com

United Initiators
Nafta
T: +1 800 231 2702
F: +1 440 323 0898
cs-initiators.nafta@united-in.com

United Initiators
China
T: +86 20 6131 1370
F: +86 139 2503 8952
cs-initiators.cn@united-in.com

United Initiators
Australia
T: +61 2 9316 0046
F: +61 2 9316 0034
cs-initiators.au@united-in.com

www.united-initiators.com

Revision number: 1.0. Date: 12.02.2016. Device M: TDS.