BU-50-WO
2,2-Di(tert.butylperoxy)butane
CAS# 2167-23-9
Liquid, 50%, solution in white oil (OMS)

Structural Formula

\[
\begin{align*}
\text{CH}_3 & \quad \text{O} \quad \text{O} \quad \text{CH}_3 \\
\text{CH}_2 & \quad \text{C} \quad \text{C}\text{H}_3 \\
\text{CH}_3 & \quad \text{CH}_3 \\
\end{align*}
\]

Description
Colourless, mobile liquid, consisting of 50% 2,2-Di(tert.butylperoxy)butane, desensitized with white oil (OMS). This aliphatic perketal is used as an initiator for the (co-)polymerisation of styrene, vinylacetate, methacrylates and others.

Technical Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>colourless liquid</td>
</tr>
<tr>
<td>Peroxide content</td>
<td>ca. 50% w/w</td>
</tr>
<tr>
<td>Active oxygen</td>
<td>ca. 6.83% w/w</td>
</tr>
<tr>
<td>De-sensitising agent</td>
<td>White oil</td>
</tr>
<tr>
<td>Density at 20°C</td>
<td>ca. 0.86 g/cm³</td>
</tr>
<tr>
<td>Viscosity at 20°C</td>
<td>ca. 7 mPa.s</td>
</tr>
<tr>
<td>Refractive index at 20°C</td>
<td>ca. 1.438</td>
</tr>
<tr>
<td>Critical temperature (SADT)</td>
<td>ca. 70°C</td>
</tr>
<tr>
<td>Cold storage stability</td>
<td>liquid until -25°C</td>
</tr>
<tr>
<td>Recommended storage temperature</td>
<td>max. 30°C</td>
</tr>
<tr>
<td>Storage stability as from date of delivery</td>
<td>6 months</td>
</tr>
</tbody>
</table>

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

Half-life Data
10h/1h/1min (0.1 m / isododecane): 104°C / 124°C / 165°C

Packaging
Standard packaging: 25 kg per canister (HDPE), 400kg per pallet
Applications

**STYRENE**
(Co-)polymerisation in bulk or suspension. Temperature range: 100-140°C. Dosage level: 0.02-0.1% as supplied.
Advantages: reduction of residual monomer contents, no reaction with chain modifiers, no hydrolysis in alkane media.
Recommended to be used in combination with more active peroxides, such as TBPEH.

**OTHERS**
Initiator for the polymerisation of vinylacetate, acrylates and methacrylates. Temperature range: 100-140°C. Dosage level: 0.05-1.0% as supplied.

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 6337
cs-initiators.eu@united-in.com

United Initiators
Narta
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: HW/14.08.2015 Device M: TDS.