# **Technical Data Sheet**



# **DTAP**

Di(tert.-amyl)peroxide CAS#10508-09-5 Liquid, techn. pure Molar mass: 174.2 g/mol

#### Structural Formula

$$CH_3$$
  $CH_3$ 
 $H_3C-CH_2-C-O-O-C-CH_2-CH_3$ 
 $CH_3$   $CH_3$ 

## **Description**

Slightly yellowish, mobile liquid, consisting of technically pure Di-(tert.amyl) peroxide. This liquid dialkyl peroxide is used as an initiator (radical source) in the polymerisation of monomers, like e.g. ethylene, styrene, and (meth)acrylates.

## **Technical Data**

Appearance	yellowish liquid
Purity (GC)	approx. 97 %
Active oxygen (calculated)	approx. 8.9 % w/w
De-sensitising agent	none
Density at 20 ℃	approx. 0.83 g/cm <sup>3</sup>
Viscosity at 20 ℃	approx. 1.3 mPa.s
Refractive index at 20 ℃	approx. 1.409
Critical temperature (SADT)	approx. 80℃
Cold storage stability	below -25℃
Recommended storage temperature	below 30 ℃
Storage stability (activity) as from date of delivery	6 months

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): 118/142/193 ℃

# **Technical Data Sheet**



#### **Application**

#### (METH-)ACRYLATES:

Initiator for the polymerisation in mass and solution, especially for the production of high-solid varnishes.

Temperature range: 160-200 ℃.

More selective radical formation, therefore narrower MW-distribution, lower viscosity and higher solid contents can be achieved compared to Di(tert.butyl)peroxide (DTBP).

#### OTHER MONOMERS:

Ethylene: High-pressure polymerisation combined with thermally active

peroxides.

Temperature range: 220-280 ℃.

#### STYRENE:

(Co-)Polymerisation of styrene, possibly with other monomers in bulk or in solution.

Temperature range: 140-180 °C.

Special advantage: Reduction of residual monomer content in the polymer.

# **Standard Packaging**

20kg 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