Technical Data Sheet



TAPEH

tert.Amylperoxy-2-ethyl hexanoate CAS#686-31-7 Liquid, technically pure Molar mass: 230.3 g/mol

Structural Formula

Description

Colourless, mobile liquid, consisting of technically pure tert.Amylperoxy-2-ethyl hexanoate. This branched, aliphatic perester is used as an initiator (radical source) in the polymerisation of monomers, e.g. ethylene, styrene and (meth)acrylates.

Technical Data

Appearance	colourless, mobile liquid
Peroxide content	approx. 98 % w/w
Active oxygen	approx. 6.81 % w/w
De-sensitising agent	none
Density at 20 ℃	approx. 0.90 g/cm ³
Viscosity at 20 ℃	approx. 4.3 mPas
Refractive index at 20 ℃	approx. 1.433
Critical temperature (SADT)	approx. 40 ℃
Cold storage stability	freezing point below -25 ℃
Recommended storage temperature	below 10 ℃
Storage stability (activity) as from date of delivery	3 months
Maximum transport temperature	20 ℃

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): 72/91/130 ℃

Technical Data Sheet



Application

ETHYLENE:

Initiator for the high-pressure polymerisation of Ethylen in combination with other peroxides of different thermal stability.

Temperature range: 160-210 ℃.

Particular advantages: liquid, readily miscible with high-boiling aliphatics, highly efficient.

STYRENE:

Initiator for the polymerisation in bulk, solution or suspension.

Temperature range: 80-110 ℃. Usage level: 0.1-0.5% as supplied.

Particular advantages: no plasticiser, liquid, therefore easy to dose, high activity. A low residual monomer content can be achieved in combination with other, thermally more stable peroxides.

OTHER MONOMERS:

Initiator for the polymerisation of (meth-)acrylates and allyl-monomers.

Temperature range: 80-120 °C. Usage level: 0.1-1% as supplied.

In combination with thermally more stable peroxides the residual monomer content in the polymer can be reduced.

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