# **Technical Data Sheet**



## BENOX®A-75

Dibenzoyl peroxide CAS#94-36-0 75% powder, water damped Molar mass: 242.2 g/mol

#### Structural Formula

## **Description**

White, free-flowing powder, consisting of ca. 75% Dibenzoyl peroxide, desensitised with water. This aromatic diacyl peroxide is used as an initiator (radical source) in the polymerisation of monomers, e.g. styrene, vinyl acetate, (meth-)acrylates, allyl compounds.

#### **Technical Data**

Appearance	white, free-flowing powder
Peroxide	approx. 75 % w/w
Active oxygen	approx. 4.95 % w/w
De-sensitising agent	water
Bulk density	approx. 0.59 kg/l
Melting point (dried)	approx. 102-105 °C
Critical temperature (SADT)	approx. 70 °C
Recommended storage temperature	5 to 30 °C
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): 72/91/130 °C

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### **Application**

#### STYRENE:

Standard initiator for the polymerisation of styrene monomer (SM) in suspension.

Temperature range: 80-110°C.

Usage level: 0.1-0.5% in supply form.

We recommend the combination with thermally more stable peroxides and a gradual increase in the reaction temperature up to 140°C for reducing the residual monomer content in the polymer.

#### VINYL ACETATE/(METH-)ACRYLATE:

Initiator for the polymerisation in bulk, suspension or solution.

Temperature range: 60-90°C. Usage level: 0.1-0.3% as supplied.

After dissolving in the monomer the aqueous phase of the peroxide may be separated. We recommend the combination with thermacally more stable peroxides (reduction of the residual monomer content).

## **ALLYL MONOMERS:**

Initiator for the polymerisation in the temperature range 80-110°C.

Usage level: 3-5% as supplied because of the low reactivity of allyl monomers.

Combination with thermally more stable peroxides and gradual increase of the reaction temperature is recommended.

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

#### Standard Packaging

 $3 \times 5 \text{ kg}$  (dry weight, 25 lb) in PE bags packed in a cardboard box. Weights are on net weight basis.

#### 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.

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