

BPO75

(Di)Benzoyl peroxide

CAS No.

94-36-0

TSCA Status

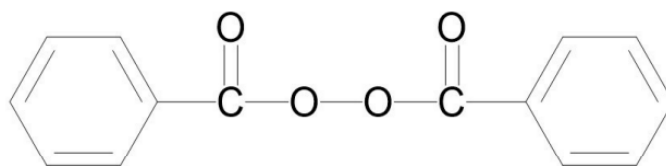
listed on inventory

EINECS/ELINCS No.

202-327-6

Molecular weight

242.2



BPO75 is an initiator (powder formulation with 75% benzoyl peroxide and 25% water) used for curing unsaturated polyester, vinyl ester and acrylic thermoset resins at ambient or slightly elevated temperatures. It is often used in conjunction with tertiary amine accelerators at ambient conditions. Typical uses include cast polymer, panels, chemical anchors and mine bolts and RTM.

Applications

BPO75 can be used for the market segments: polymer production, thermoset composites and acrylics production with their different applications/functions. For more information please check our website and/or contact us.

Half-life data

The reactivity of an organic peroxide is usually given by its half-life ($t_{1/2}$) at various temperatures. For BPO75 in chlorobenzene half-life at other temperatures can be calculated by using the equations and constants mentioned below:

0.1 hr	at 113°C (235°F)
1 hr	at 91°C (196°F)
10 hr	at 71°C (160°F)
Formula 1	$k_d = A \cdot e^{-E_a/RT}$
Formula 2	$t_{1/2} = (\ln 2)/k_d$
E_a	122.35 kJ/mole
A	6.94E+13 s ⁻¹
R	8.3142 J/mole·K
T	(273.15+°C) K

Thermal stability

Organic peroxides are thermally unstable substances, which may undergo self-accelerating decomposition. The lowest temperature at which self-accelerating decomposition of a substance in the original packaging may occur is the Self-Accelerating Decomposition Temperature (SADT). The SADT is determined on the basis of the Heat Accumulation Storage Test.

SADT	80°C
Emergency temperature (T_e)	75°C
Method	The Heat Accumulation Storage Test is a recognized test method for the determination of the SADT of organic peroxides (see Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria - United Nations, New York and Geneva).

Storage

Due to the relatively unstable nature of organic peroxides a loss of quality can be detected over a period of time. To minimize the loss of quality, Do Sender Chem recommends a maximum storage temperature (T_s max.) for each organic peroxide.

T_s Max.	40°C
Note	When stored under the recommended storage conditions, BPO75 will remain within the Do Sender Chem specifications for a period of at least 3 months after delivery.

Packaging and transport

Packed in plastic drums with specifications of 25kg.

BPO75 is classified as Organic peroxide type C; solid, Division 5.2; UN 3104; PG II.

Major decomposition products

Carbon dioxide, Benzene, Benzoic acid

BPO50 Paste

(Di)Benzoyl peroxide

CAS No.

94-36-0

TSCA Status

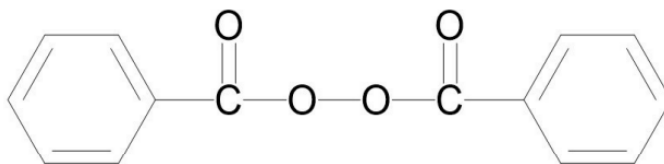
listed on inventory

EINECS/ELINCS No.

202-327-6

Molecular weight

242.2



BPO50 Paste is the preferred BPO paste for unsaturated polyester & vinyl ester resins.

Applications

BPO50 Paste is a paste containing 50% dibenzoyl peroxide without phthalate for the curing of unsaturated polyester resins at ambient and elevated temperatures. At temperatures up to 80°C, BPO50 Paste should be used in combination with an aromatic tertiary amine accelerator, above 80°C the use of an accelerator is not required. BPO50 Paste has primarily been developed for the putty market. BPO50 Paste shows a very good chemical and physical stability and is therefore very suitable for tube filling.

Thermal stability

Organic peroxides are thermally unstable substances, which may undergo self-accelerating decomposition. The lowest temperature at which self-accelerating decomposition of a substance in the original packaging may occur is the Self-Accelerating Decomposition Temperature (SADT). The SADT is determined on the basis of the Heat Accumulation Storage Test.

SADT

70°C (158°F)

Method

The Heat Accumulation Storage Test is a recognized test method for the determination of the SADT of organic peroxides (see Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria - United Nations, New York and Geneva).

Storage

Due to the relatively unstable nature of organic peroxides a loss of quality can be detected over a period of time. To minimize the loss of quality, Do Sender Chem recommends a maximum storage temperature (Ts max.) for each organic peroxide.

Ts Max. 30°C (86°F)

Note When stored under the recommended storage conditions, BPO50 Paste will remain within the Do Sender Chem specifications for a period of at least 3 months after delivery.

Packaging and transport

Packed in plastic drums with specifications of 25kg.

BPO50 Paste is classified as Organic peroxide type E; solid, Division 5.2; UN 3108; PG II.

Major decomposition products

Carbon dioxide, benzene, benzoic acid

BPO50-PD

(Di)Benzoyl peroxide

CAS No.

94-36-0

TSCA Status

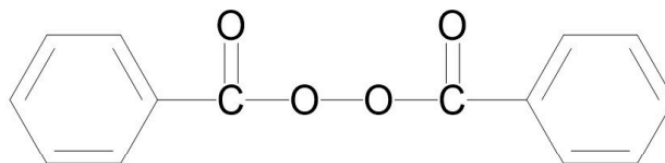
Not listed on inventory

EINECS/ELINCS No.

202-327-6

Molecular weight

242.2



Applications

BPO50-PD is a free-flowing 50% peroxide formulation on a phthalate-free carrier for curing unsaturated polyester resins and (meth)acrylic resins at ambient and elevated temperatures. Provides excellent solubility in standard thermoset curing applications.

Thermal stability

Organic peroxides are thermally unstable substances, which may undergo self-accelerating decomposition. The lowest temperature at which self-accelerating decomposition of a substance in the original packaging may occur is the Self-Accelerating Decomposition Temperature (SADT). The SADT is determined on the basis of the Heat Accumulation Storage Test.

SADT

55°C

Method

The Heat Accumulation Storage Test is a recognized test method for the determination of the SADT of organic peroxides (see Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria - United Nations, New York and Geneva).

Storage

Due to the relatively unstable nature of organic peroxides a loss of quality can be detected over a period of time. To minimize the loss of quality, Do Sender Chem recommends a maximum storage temperature (Ts max.) for each organic peroxide.

Ts Max.

25°C

Note

When stored under these recommended storage conditions, BPO50-PD will remain within the Do Sender Chem specifications for a period of at least 12 months after delivery.

Packaging and transport

Packed in 25kg cardboard box.

BPO50 Paste is classified as Organic peroxide type D; solid, Division 5.2; UN 3106;

Major decomposition products

Carbon dioxide, benzene, benzoic acid, diphenyl, phenylbenzoate

BPO32

(Di)Benzoyl peroxide

CAS No.

94-36-0

TSCA Status

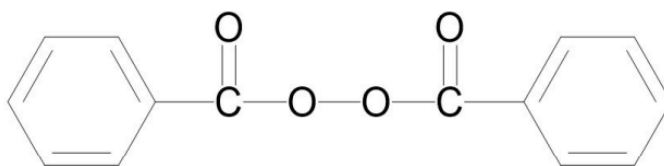
listed on inventory

EINECS/ELINCS No.

202-327-6

Molecular weight

242.2



The application for BPO32 is the bleaching of flour, oil, whey & cheese products.

Applications

The application for BPO32 is the bleaching of flour, oil, whey & cheese products. The free-flowing nature of the product allows for accurate dosing and thorough distribution in the product with proper mixing. This gives rise to higher and more even bleaching efficiency through oxidation of colored matter.

Thermal stability

Organic peroxides are thermally unstable substances, which may undergo self-accelerating decomposition. The lowest temperature at which self-accelerating decomposition of a substance in the original packaging may occur is the Self-Accelerating Decomposition Temperature (SADT). The SADT is determined on the basis of the Heat Accumulation Storage Test.

SADT

60°C

Method

The Heat Accumulation Storage Test is a recognized test method for the determination of the SADT of organic peroxides (see Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria - United Nations, New York and Geneva).

Storage

Due to the relatively unstable nature of organic peroxides a loss of quality can be detected over a period of time. To minimize the loss of quality, Do Sender Chem recommends a maximum storage temperature (Ts max.) for each organic peroxide.

Ts Max.

25°C (77°F)

Note

When stored under the recommended storage conditions, BPO50 Paste will remain within the Do Sender Chem specifications for a period of at least 3 months after delivery.

Packaging and transport

Packed in plastic drums with specifications of 25kg.

BPO32 is classified as Organic peroxide type F; Liquid, Division 5.2; UN 3109; PG II.

Major decomposition products

Carbon dioxide, benzoic acid, benzene, diphenyl, phenyl benzoate