# **EST-PSM**

### **DESCRIPTION**

Di(2,4-dichlorobenzoyl) peroxide, paste 50% in silicone oil

$$CI - \left( \begin{array}{c} \\ \\ \\ \\ CI \end{array} \right) - \left( \begin{array}{c} \\ \\ \\ \\ CI \end{array} \right) - CI$$

Molecular weight : 380.0
Active oxygen content peroxide : 4.21%

actual product : 2.06-2.15%

CAS No. : 133-14-2 EINECS/ELINCS No. : 205-094-9

TSCA status : listed on inventory

EST-PSM is a monofunctional peroxide formulation which is mainly used for the crosslinking of silicone rubbers.

## **Specifications**

Appearance : Off-white homogeneous paste

Assay : 49.0-51.0% Water : 1.5% max.

#### **Characteristics**

Density, 20°C : 1.18 g/cm<sup>3</sup>

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## 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, Yantai E.S.T silicone tech co.,Ltd recommends a maximum storage temperature (T<sub>s</sub> max.) for each organic peroxide product.

For EST-PSM  $T_s max. = 30$ °C

When stored under these recommended storage conditions, *EST-PSM* will remain within the Yantai E.S.T silicone tech co.,Ltd specifications for a period of at least six months after delivery.

### Thermal stability

Organic peroxides are thermally unstable substances, which may undergo self-accelerating decomposition. The lowest temperature at which selfaccelerating 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.

For EST-PSM	
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.	
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Major decomp	osition products
Carbon dioxide, 1, 2,2',4,4' tetrachlor	,3-Dichlorobenzene, 2,4-Dichlorobenzoic acid, Traces of obiphenyl
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Dockoging one	d transport

# **Packaging and transport**

The standard package is a plastic pail with 20 kg net weight.

Both packaging and transport meet the international regulations. For the availability of other packed quantities contact your Yantai E.S.T silicone tech co.,Ltd representative.

EST-PSM is classified as Organic peroxide type D; solid, Division 5.2; UN 3106.

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# Safety and handling

Keep containers tightly closed. Store and handle *EST-PSM* in a dry well-ventilated place away from so urces of heat or ignition and direct sunlight. Never weigh out in the storage room.

Avoid contact with reducing agents (e.g. amines), acids, alkalis and heavy metal compounds (e.g. accelerators, driers and metal soaps).

Store above 10°C to prevent freezing and product separation.

Please refer to the Material Safety Data Sheet (MSDS) for further information on the safe storage, use and handling of *EST-PSM*. This information should be thoroughly reviewed prior to acceptance of this product. The MSDS is available at www.siltech21.com

# **Applications**

EST-PSM is mainly used for the crosslinking of silicone rubbers.

- With EST-PSM silicone rubber compounds can be cured without external pressure (hot air and/or IR vulcanization).
- EST-PSMcan easily be in corporated into a silicone rubber compound on a 2-roll mill.
- Safe processing temperature: 65°C (rheometer t<sub>s2</sub> > 20 minutes).
- Typical crosslinking temperature: 90°C (rheometer t<sub>90</sub> about 12 minutes).
- To obtain a suitable degree of crosslinking in silicone polymers, the level of dosing is recommended to be 1.1-2.3 phr.

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