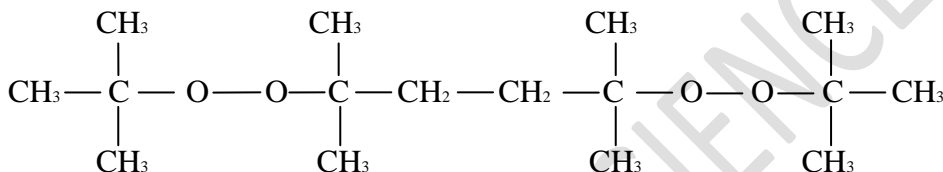


# Matrinox 101

**Product Description:** 2,5-Dimethyl-2, 5-di(tert-butylperoxy) hexane



Molecular weight	: 290.4
Active oxygen content peroxide	: 11.02%
CAS No.	: 78-63-7

Matrinox 101 is a bifunctional peroxide which is used for the crosslinking of natural and synthetic rubbers, as well as thermoplastic polyolefins.

### Specifications:

Appearance	: Clear liquid
Colour	: 50 Pt-Co max.
Assay	: 92.0% min.
Active Oxygen	: 10.14% min.
Hydroperoxides as 2,5- dihydroperoxy -2-5-dimethylhexane	: 0.3% max.

### Characteristics:

Density, 20°C	: 0.870 g/cm <sup>3</sup>
Flashpoint	: >65°C (>149°F)
Freezing point	: 6°C (43°F)

# Matrinox 101

## **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, Matrix material sciences recommends a maximum storage temperature ( $T_s$  max.) for each organic peroxide product.

For Matrinox 101  $T_s$  max. = 40° C (104°F)  
 $T_s$  min. = 10°C (50°F)

When stored under these recommended storage conditions, Matrinox 101 will remain within the Matrix material sciences 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 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.

For Matrinox 101 SADT : 80°C (176° F)

## **Major decomposition products :**

Methane, Ethane, Acetone, Tert-Butanol, Tert-Amyl alcohol

## **Packaging and transport :**

The standard packaging is a 25 kg.

Both packaging and transport meet the international regulations. For the availability of other packed quantities contact your Matrix representative.

Matrinox 101 is classified as Organic peroxide type C; liquid , Division 5.2; UN 3103.

# Matrinox 101

## **Safety and handling :**

Keep containers tightly closed. Store and handle Matrinox 101 in a dry well-ventilated place away from sources 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).

Please refer to the Material Safety Data Sheet (MSDS) for further information on the safe storage, use and handling of Matrinox 101. This information should be thoroughly reviewed prior to acceptance of this product.

## **Applications :**

Matrinox 101 is used for the crosslinking of natural and synthetic rubbers, as well as thermoplastic polyolefins.

- Rubber compounds containing Matrinox 101 have excellent scorch safety.
- Safe processing temperature: 135°C (rheometer  $t_{s2} > 20$  minutes).
- Typical crosslinking temperature: 175°C (rheometer  $t_{90}$  about 12 minutes)