# LUPEROX® 101

# Organic Peroxide

### **Introduction and Applications**

Luperox® 101 organic peroxide has two main application areas: the viscosity modification of polypropylene and the crosslinking of rubber or elastomers. Viscosity modification is a means to increase the melt flow rate of polypropylene by chain scission. Luperox® 101's very high half-life is especially useful in the curing of engineered rubber compounds without causing odor or any peroxide blooming.

# **Product Description**

Chemical Name	CAS-No.	Wt/Wt
2,5-dimethyl-2,5-di-(tert-butylperoxy)hexane	78-63-7	technically pure

**Standard Specifications** 

otaridard opeomoditoris		
93 – 95 %		
10.25 – 10.47 %		
≤ 3.00 %		
≤ 0.20 %		
≤ 100		

Typical Physical Properties		
SADT	86°C (187°F) 30 pound container	
specific gravity	0.9 at 15°C (59°F)	

8°C (46°F)

freezing point

#### Half-Life Data

Half-life can be defined as the time required at a specific temperature, to affect a loss of one-half of the peroxide's active oxygen content. The efficiency of a free radical initiator depends upon its rate of decomposition.

Half-life data can be a useful guide in selecting the optimum initiator for a specific application. Several factors apply to half-life data obtained in dilute solution:

- (a) Use only applies to thermolytic decomposition
- (b) Half-life varies in different solvents due to induced decomposition if no radical scavenger is present

Time	Deg C	Deg F
100 hours	102.1	215.8
10 hours	120.3	248.5
1 hour	140.3	284.5
6 minutes	162.4	324.4
1 minute	181.4	358.5
1 second	231.6	448.9

## **Temperature Tolerance**

Do not store above: 38°C (100°F) Do not store below: 10°C (50°F)

#### **Shelf-Life**

Luperox® 101 polymer initiator has a shelf-life of 12 months from the date of Arkema delivery.

#### Packaging

Luperox<sup>®</sup> 101 polymer initiator is packaged in 5-gallon jerricans.

# **Availability**

Luperox® 101 polymer initiator is available worldwide from Arkema and authorized distributors.

To discuss availability or speak to a salesperson, please call 844-LUPEROX.

#### **LUPEROX® ORGANIC PEROXIDES WORLDWIDE**



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