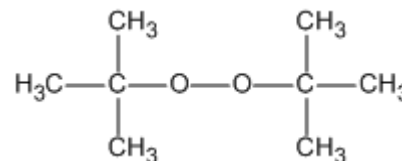


LUPEROX® DI

Polymer Initiator

Introduction and Applications

Luperox® DI polymer initiator is a useful initiator for the high pressure polymerization of ethylene using both tubular and autoclave processes. According to the reactivity, the most suitable application area is in high temperatures of 250-290°C with pressures of 1800-2000 bar. In this scenario, the use of Luperox® DI polymer initiator improves the overall conversion of ethylene into polyethylene in the final step of polymerization.



Product Description

Chemical Name	CAS-No.	Wt/Wt
di-tertiary butyl peroxide	110-05-4	technically pure

Standard Specifications

assay	≥ 98.5
active oxygen	≥ 10.78
t-butyl hydroperoxide	≤ 0.03 %
color, APHA	≤ 40

Typical Physical Properties

SADT	180°F (82°C)
auto-ignition temperature	320°F (160°C)
resistivity	830,000 MOhm.m (72°F)
freezing point	-35°F (-37°C)

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.

Time	Deg C	Deg F
10 hours	129.4	264.9
1 hour	149.1	300.4

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:

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

Temperature Tolerance

Do not store above: 38°C (100°F)

Do not store below: -30°C (-22°F)

Shelf-Life

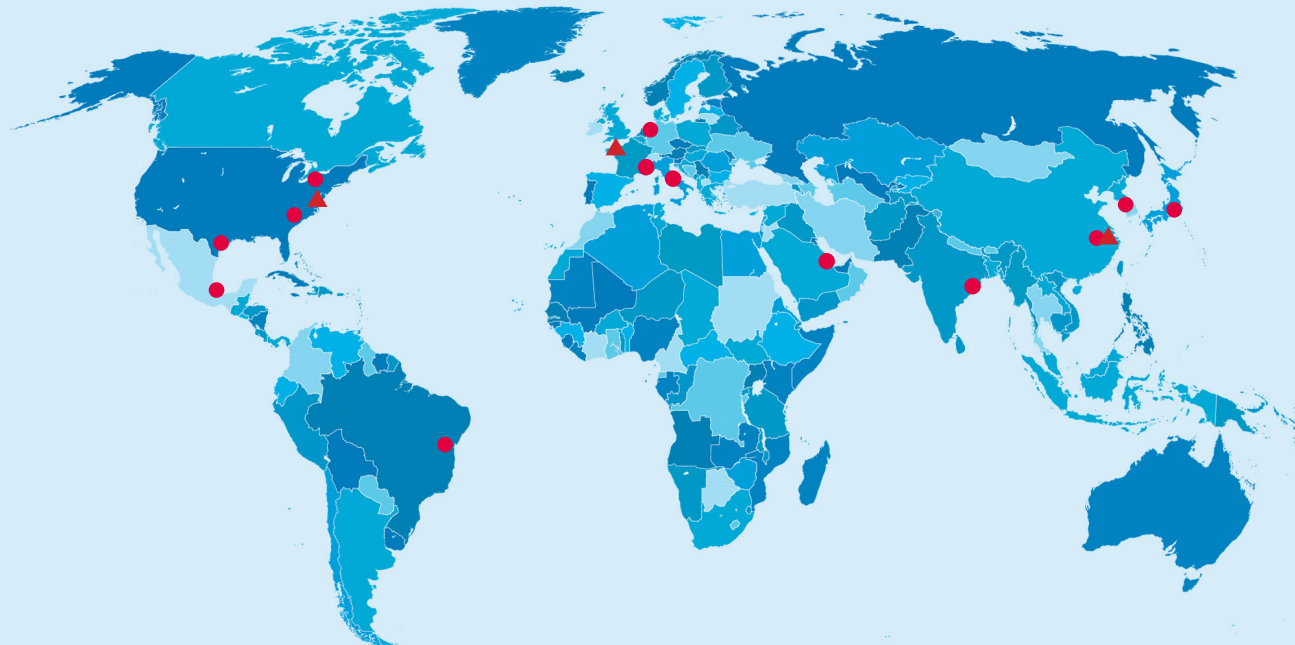
Luperox® DI polymer initiator has a shelf-life of 12 months from the date of Arkema delivery.

Packaging

Luperox® DI polymer initiator is available packaged in 7-gallon jerricans, 15-gallon drums, and 55-gallon drums.

Availability

Luperox® DI polymer initiator is available in North America from Arkema and authorized distributors. To discuss availability or speak to a salesperson, please call 844-LUPEROX.



- Organic Peroxides Plants
 - ▲ Research Centers
- | | | |
|--|---|---|
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