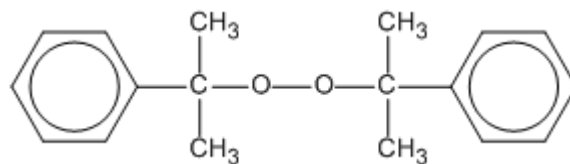


# Di-Cup® R

Dicumyl Peroxide

## Introduction & Applications

Di-Cup® R crystal is a curing agent for rubber and elastomer crosslinking applications. When heated, it forms alkoxy radicals that abstract hydrogen from a polymer backbone, forming polymer radicals. A combination of two radicals results in a crosslink. In general, the crosslinking rate is equivalent to the rate of Di-Cup® R dicumyl peroxide decomposition. The rate of cure is therefore dependent on cure temperature and can be predicted for each polymer system. Typical processing temperature for compounds containing Di-Cup® R is 300°F to 425°F.



## Product Description

Chemical Name	CAS-No.	Wt/Wt
dicumyl peroxide	80-43-3	technically pure

## Standard Specifications

dicumyl peroxide, % by HPLC	≥ 99%
active oxygen, %	≥ 5.86%

## Typical Physical Properties

SADT	91°C (196°F)
melting point	38°C (100°F)

## 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	117.1	242.7
1 hours	137.0	278.5

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: 30°C (86°F)**

## Shelf-Life

When stored at room temperatures of 24 to 26°C (75 to 79°F), Di-Cup® R is stable and can be held for several years without any appreciable loss of peroxide activity. Turnover of inventory on at least an annual basis is recommended.

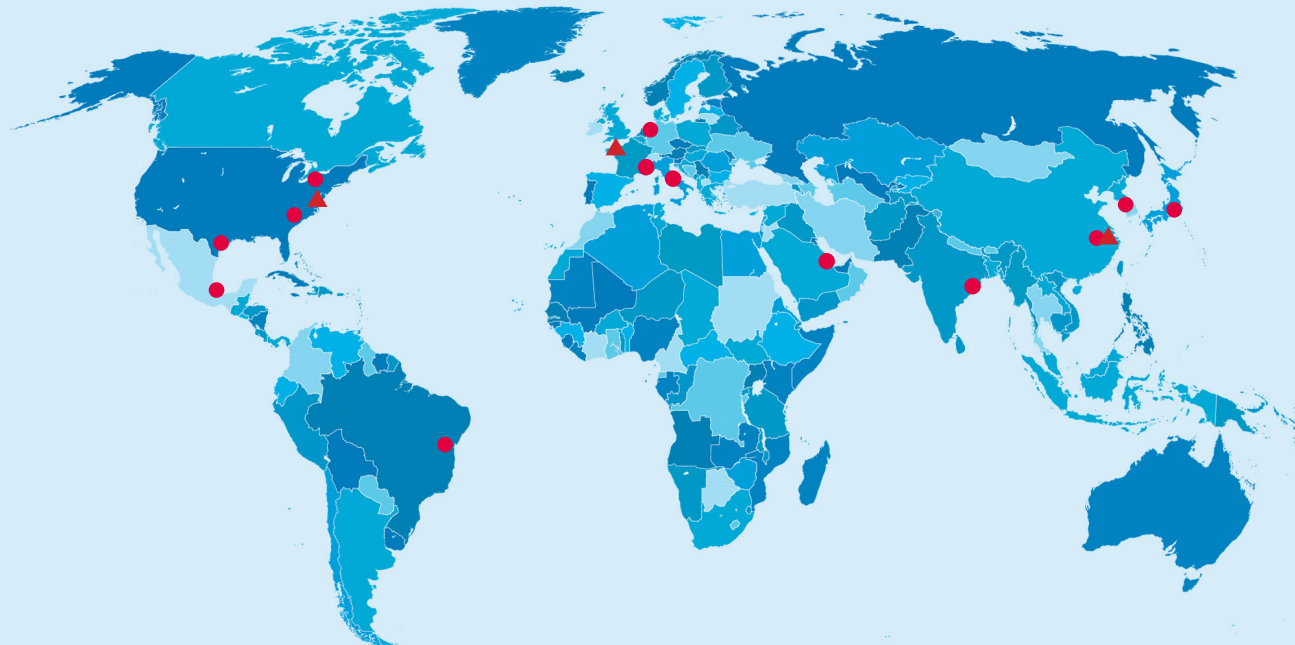
## Packaging

Di-Cup® R is packaged in 4x5 kg cartons or 20 kg cartons.

## Availability

Di-Cup® R is available in North America from Arkema and authorized distributors. To discuss availability or speak to a salesperson, please call 844-LUPEROX.

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