

# NEROLAC PERMA

## RETARD

Super plasticising and set retarding admixture for concrete.

### SPECIFICATION

ASTM C 494 : Types B, & D  
IS : 9103-2007

### DESCRIPTION

Retard is a liquid admixture for concrete based on refined Lignosulfonates and Naphthalene formaldehyde blends. Retard helps in production of super plasticised and set retarded concrete to enable the delayed pouring of concrete after its production or to get over the problems arising during hot weather concreting.

### PRIMARY USES

To produce concrete with delayed initial and final setting times.

### ADVANTAGES



Use of Retard in hot weather ensures continuous pours resulting in monolithic sound concrete.



Improves ultimate strengths significantly.



Helps saving cements in rich mixes.

### DIRECTIONS FOR USE

Retard should be added to the concrete mix along with water in the desired dosage. Retard should not be added to the dry mix.

### DOSAGE

Field trials should be carried out with the given cement and aggregates to arrive at optimum dosages for the desired property to be achieved. However for guidance we specify a range of 0.3 to 0.9 percent by weight of the cement.

## PROPERTIES

Form	:	Liquid
Colour	:	Dark Brown / Black
Specific Gravity	:	1.19 gm/cc at 25°C
Chlorides	:	Free from any added chloride.
Sulphates	:	Nil
Nitrates	:	Nil
Freezing Point	:	0°C. Can be reconstituted if stirred after thawing
Flash Point	:	None

## HEALTH AND SAFETY

Retard is not a health hazard or fire risk, spillages should be washed immediately to avoid stains and slipping.

## PACKING

Retard is available in 10 Litres, 25 Litres, 100 Litres and 210 Litres drum.

## SHELF LIFE

Retard has a shelf life of 24 Months from the date of manufacture.

### DISCLAIMER

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