



# Rapid Hardener & Plugger

## A CHLORIDE BASED CEMENT ACCELERATOR

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Fact Sheet No.: TDS00267

### YOUR SMART ADVANTAGES

- Accelerates setting time of concrete mixes
- Ideal for screeds and flooring
- Plug pressure leaks fast

### USES

Bostik Rapid Hardener & Plugger is based on calcium chloride and surface active materials. It is formulated to accelerate the setting of cementitious mixes and to aid the attainment of high early strength in concrete and mortar mixes. It is suitable for use with cement and concrete mixes, precast concrete, dense heavy duty renderings and plugging pressure leaks. Before using this product refer to the relevant Health & Safety Sheet.

### PRODUCT CHARACTERISTICS

Colour	Transparent brown
Form	Thin aqueous liquid
Specific Gravity	1.1 Approx.
Composition	Calcium Chloride solution
Product Code	366923 5 litres x 4
Storage/Shelf Life	Store for up to 2 years from date of manufacture when stored in original unopened containers in a cool, dry place within the temperature range +5°C to +25°C and out of direct sunlight. Protect from frost.

### DIRECTIONS FOR USE

Before using Bostik Rapid Hardener & Plugger refer to the relevant Health & Safety Data Sheet, available at [www.bostik.co.uk](http://www.bostik.co.uk).

The hardening times and quantities are only approximate, based on average grade materials and mixes at (+20°C). Variations may occur under real site conditions. The hardening times indicate when the cement has hardened sufficiently to withstand light pressure. A longer time will be required before it can be subjected to heavy traffic. Old cement and or cold conditions will greatly extend these times. For instance at +10°C the setting times will take at least twice as long.

### Rapid Hardening Guide

Use	Mix OPC : Sand : Aggregate	Required Hardener (in litres) to:		Hardening time at +20°C
		25kg cement	Per m <sup>3</sup> of mix	
Pressure leak sealing	Fresh OPC	-	-	2 mins
Concrete	1:2:4	1.2	11	7 hrs
	1:2:4	2.5	22.5	2.5 hrs
Floor Screeds	1:3:0	1.2	18	6 hrs
	1:3:0	2.5	36	2 hrs

### Cold Weather Working Guide

Use	Mix OPC : Sand : Aggregate	Addition ratio to:		Frost protection
		Water	25kg Cement	
Floor screeds	1:3:0	1:8	1.2 litres	- 4°C
		1:4	2.5 litres	- 8°C
Concrete	1:2:4	1:10	1.2 litres	- 4°C
		1:5	2.5 litres	- 8°C



Bostik Limited, Common Road, Stafford, ST16 3EH, UK. Tel: +44 (0) 1785 272625 [www.bostik.co.uk](http://www.bostik.co.uk)

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## PREPARATION

1. Add to gauging water. See mix ratios. (Do not add directly to cement as this will cause a flash set).
2. Use only with ordinary or rapid hardening Portland Cement, masonry cements or white cement.
3. Only mix enough material that can be used in the time available. Do not attempt to add more water once the mix has started to stiffen.
4. Ensure materials, mix designs and procedures comply with the relevant British Standards and Code of Practice.

## APPLICATION

### Cold Weather Working

5. All materials must be free from ice and the temperature of the mix prior to placing should not be below +4°C.
6. Keep working area above freezing point until minimum strength is attained by covering with a plastic sheet.
7. Bricklaying mortars at low temperatures - for this application Bostik Wintaplas Chloride Free Frostproofer or Bostik Entrainit are recommended.

### To Plug Leaks

8. Gauge fresh Ordinary Portland Cement with undiluted Bostik Rapid Hardener & Plugger to make a putty-like plug.
9. Force plug into prepared area, work quickly, as it will set in under 5 minutes.

## CLEANING

10. Clean tools and equipment with water immediately after use.

## PRECAUTIONS IN USE

IMPORTANT: Calcium chloride based product. Bostik Rapid Hardener & Plugger must not be used in mortar, concrete or masonry which is structural, load bearing, pre-stressed, steam cured or contains embedded metals e.g. steel reinforcement, metal wall ties, galvanised lintels etc. Use only with ordinary or rapid hardening Portland cement, masonry cements or white cement. Do not use with high alumina, sulphate resisting or extra rapid hardening cement. Ensure materials and procedures comply with the appropriate British Standards. Do not use with other admixtures or with lime based mixes.

Use Bostik Wintaplas Chloride Free Frostproofer for any mortar, concrete or masonry mix that comes into contact with metal ties, reinforcements, or for structural work.

For health and safety instruction, first aid measures and spillage and disposal instructions, see separate Health and Safety Data sheet for Bostik Rapid Hardener & Plugger.

BOSTIK HOTLINE

Smart help +44 (0) 1785 272625



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Sales	Tel: 0844 371 1192	Fax: 01785 241818	<a href="mailto:customer.service@bostik.com">customer.service@bostik.com</a>
Technical Advice	Tel: 0844 371 1197	Fax: 01785 272867	<a href="mailto:technical.service@bostik.com">technical.service@bostik.com</a>
Technical Data & COSHH (MSDS) Data Sheets	Tel: 01785 272625	Fax: 01785 212962	<a href="mailto:stafford.gatehouse@bostik.com">stafford.gatehouse@bostik.com</a>



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