

# **Sprayset HBP**



# Non-caustic admixture for sprayed concrete and shotcrete

#### Uses

Used to enable a high build of sprayed concrete, shotcrete and gunite. It provides set acceleration and reduces rebound

## **Advantages**

- Low rebound due to controlled set
- No adverse affect on strength
- High build up with minimal slump ensures faster coverage rates
- Safe to handle

### **Standards compliance**

Sprayset HBP meets the requirements of ACI 506-66. Recommended Practice for Shotcreting. Concrete Society Specification for Sprayed Concrete.

## **Description**

Sprayset HBP is a chloride free non-caustic admixture for sprayed concrete, shotcrete and gunite. It is supplied as a powder which is added to the mix to impart properties of high build and low rebound.

#### **Technical support**

Fosroc provides a technical advisory service for on-site assistance and advise on admixture selection, evaluation trials and dispensing equipment. Technical data and guidance can be provided for admixtures and other products for use with fresh and hardened concrete.

#### Typical dosage

The optimum dosage for Sprayset HBP to meet specific requirements should always be determined by trials using the materials and conditions that will be experienced in use.

This allows the optimisation of admixture dosage. Typical dosage levels for Sprayset HBP for use in sprayed concrete, shotcrete and gunite lies in the range of 2 to 5 kg/ 100kg of cement.

# Use at other dosages

Dosages outside the typical range quoted above may be used if necessary and suitable to meet particular mix requirements, provided that adequate supervision is available. Compliance with requirements must be assessed through trial mixes. Contact Fosroc for advice in these cases.

### **Properties**

Appearance	Off-white powder		
Bulk Density	1.08 grams/cc		

\* The uniformity parameters like specific gravity, pH, chloride content etc. will vary for specific customer requirements and mix design. Please refer our MTC issued for specific product configuration for measuring our product parameters that will be constantly and consistently administered

#### **Application instructions**

### **Mixing**

Sprayset HBP should be well dispersed in the dry mix either as a bulk blend or with automatic dosing equipment while feeding the concrete mix. It is recommended that the moisture content of the mix is below 4% and that addition of Sprayset HBP occurs immediately prior to use.

#### **Effects of overdosing**

An overdoes of double the intended amount of Sprayset HBP will have little effect on properties of build, set time, or strength gain compared to that normally obtained at the intended dosage.

### Curing

As with all cementitious systems, good curing practice should be maintained.

### **Typical performance examples**

Many variables in concreting materials and conditions can affect the selection and use of an admixture. Trials should be made using relevant materials and conditions in order to determine the optimum mix design and admixture dosage to meet specific requirements.

Typical performance examples from evaluation studies of Sprayset HBP are included on this datasheet. The values quoted are representative of results obtained and are provided all illustrations of the performance in different situations. Because of the variability of concrete materials, the results should only be taken as typical of the performance to be expected. Results quoted in individual example should not be taken as necessarily directly comparable with other examples

# **Sprayset HBP**

given here or results obtained elsewhere for Sprayset HBP or other products.

Control mortar 1:3 OPC: Zone 3 sand

All mix w./c 0.5. All admix 5% on cement.

Table 1: High build / controlled set

Mix	Build	Initial set	Final set	
	mm	min.	min.	
Control	50	160	240	
Control +5%				
Sprayset HBP	100	15	30	

Typical results, set time measured to BS 4550

Table 2: Strength gain (Compressive strength MPa)

Mix	1 hr.	6 hrs.	24 hrs.	28 days
Control	<1	1.25	17.8	46.3
Control + 5%	<1	1.75	19.2	46.4
Sprayset HBP				

Typical Compressive strength when tested in accordance with BS 6319

# **Estimating - Packaging**

Sprayset HBP is available in 25 kg bags.

#### **Storage**

Sprayset HBP has a minimum shelf life of 6 months provided the temperature is kept within the range of 10°C to 40°C. Should the temperature of the product fall outside this range, contact for advice.

#### **Precautions**

# **Health and Safety**

Sprayset HBP does not fall into the hazard classifications of current regulations. However, it should not be swallowed or allowed to come into contact with skin or eyes. Suitable protective gloves and goggles should be worn.

Splashes on the skin should be removed with water. In case or contact with eyes rinse immediately with plenty of water and seek medical advise. If swallowed, seek medical attention immediately - do not induce vomiting.

For further information contact Fosroc.

#### **Fire**

Sprayset HBP is non-flammable

#### **Cleaning and disposal**

Spillages of Sprayset HBP should be hosed down with water

## Important note:

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation specification or information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products whether or not in accordance with any advice, specification, recommendation or information given by it.



#### **Berger Fosroc Limited**

Corporate Address:

'Berger House', House # 08, Road # 02, Sector # 03, Uttara Model Town, Dhaka 1230, Bangladesh. telephone( Hunting): +880248953665, fax: +880248951350,

e-mail: enquiry.bangladesh@bergerfosroc.com, website: www.bergerfosroc.com

