

Technical Data Sheet

# CRYSTAL C 320

Crystalline Waterproofing Liquid Concrete Admixture

#### Description

**CRYSTAL C 320** is a waterproofing concrete admixture that forms crystal fiber on the capillary gaps of concrete to provide permanently water impermeability.

#### Fields of Application

- In suitable for all concrete applications to needed water impermeability.
- In foundations, basements.
- In tunnels, dams.
- In precast concrete elements.
- In potable water tanks and waste water tanks.
- In water treatment plant.
- In swimming pools.
- In elevator pits.
- In garage.

#### Features and Benefits

- Provides permanently active waterproofing. During the curing time, it creates insoluble nano structural crystal into the capillary cracks.
- Protects the concrete against negative and positive water pressure (14 bars).
- Non toxic. Safely used in water tanks.
- Water vapor permeable. It allows the building to breath.
- It is used without any risk of clumping as compared to powder products because added to the concrete mixture as a liquid,
- Easy to prepare and apply.
- Suitable for bored piled raft insulation.
- Does not need to any additional waterproofing applications.
- Does not harm for human health and environment.

#### Technical Data

Color	Transparent Brownish
Density	1,15 kg/lt
рН	11,5

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Mixing	With water	
Application Temperature	+5°C to +35°C	
Workability Time	45 minutes	
HS Code	3824.40.00.00.00	

#### Application Procedure

#### **Application Method**

- Shake CRYSTAL C 320 well before use.
- Control of the concrete mix design regarding water/concrete ratio < 0,55 prior to dosing CRYSTAL C 320.
- **CRYSTAL C 320** must be added into the concrete as the ratio of 2 %.
- Mixture;
  - If prepared in construction yard; **CRSYTAL C 320** must be added %2 of cement on ready to apply concrete mixture and stirred 5 minutes.
  - If prepared in concrete plant; **CRYSTAL C 320** is added on water then this mixture is added on concrete mixture as last ingredients.
- Workability time is approximately 45 minutes after the addition of **CRYSTAL C 320**.

#### Consumption

If the Water/Cement ratio is < 0,55; CRYSTAL C 320 is added 2% by the weight of cement on the mixture. Water/Cement ratio should not be up to 0,55.

#### Packaging

30 kg plastic drum

#### Shelf Life

12 months in original, unopened package.

#### Storage

Store in dry area between +5°C and +35°C. Protect from heat, freezing and direct sunlight.

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#### **Cautions / Limitations**

- Water/Cement ratio shouldn't be up to 0,55.
- Use retarder when using CEM II or III Portland cement.
- It may be harmful with skin contact.
- Do not apply in freezing conditions or during precipitation.
- Protect applied materials from rain, freezing, foot traffic and continuous high humidity until completely dry.
- Do not use when air and surface temperatures are below +5°C and above +35°C.

#### Health and Safety

**Warning!** Cause eye and skin irritation. If eye or skin contact, get immediate medical attention. If swallowed, do not induce vomiting. Call a physician or poison control center. Never give anything by mouth to an unconscious person.

Wash hands thoroughly after handling. Wear protective clothing, gloves, eye and face protection. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Dispose of unused, contents, container and other contaminated wastes in accordance with local, state, federal and provincial regulations.

Keep container closed when not in use. Keep out of the reach of children.

**Limited Warranty:** This product is subject to a written limited warranty which can be obtained free of charge from BAUMERK Company. Please contact with technical service department for further information and support.

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### CRYSTAL C 320 Crystalline Waterproofing Liquid Concrete Admixture

BAUMERK YAPI VE KİMYA SANAYİ VE TİCARET Ltd. Şti. Dursunköy Mahallesi Uygur Caddesi No:44 34555 Hadımköy Arnavutköy / İstanbul		
TÜRKİYE		
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1020-CPR-040 051770 DOP NO: 0934-203 EN 934-2:2009+A1:2012 CRYSTAL C 320 Harç ve Betonlarda Kullanılan Kristalize Esaslı Katkı Su Geçrimsizlik Katkıları , Çizelge 9 Crystalline Based Additive Used in Mortar and Concrete Waterproofing Additives, Table 9		
Capillary Water Absorption Kılcal Su Emme	After 7 days of cure, for 7 days of experiment; trial concrete, maximum 50% of the witness concrete; After 90 days of cure, for 28 days of experiment; trial concrete, maximum 60% of the witness concrete 7 günlük kürden sonra , 7 günlük deney için; deneme betonu , şahit betonun en çok % 50'si; 90 günlük kürden sonra, 28 günlük deney için; deneme betonu ,şahit betonun en çok %60'ı	
Compressive Strength Basınç Dayanımı	In 28 days, the trial concrete is at least 85% of the witness concrete. 28 günde, deneme betonu, şahit betonun en az % 85'i	
Amount of Air in Fresh Concrete Taze Betondaki Hava miktarı	Unless otherwise specified by the manufacturer, The trial concrete is at most 2% higher than the witness concrete by volume. Üretici tarafından aksi belirtilmedikçe, deneme betonu, şahit betonun hacimce en çok % 2 üzerinde	
Highest Chlorine Content En Yüksek Klor Muhtevası	%0,02	
Highest Alkali Content En Yüksek Alkali Muhtevası	%4,4	
Dangerous materials Tehlikeli Maddeler	Does Not Contain Any Hazardous Substances Herhangi Bir Tehlikeli Madde İçermez	

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