



A Mark of Quality
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BondChem Construction Chemicals



ShieldTop EP (2K High Build, Abrasion Resistant, Epoxy based Floor Coating)

ShieldTop EP is a two pack high build, epoxy based resin floor coating which cures to provide hard wearing, chemical and abrasion resistant floor finish. It is ideally suited for use in areas where a high degree of resistance to chemicals, oils and grease is required such as dairies, soft drinks production facilities, chemical manufacturing plants, car parks & workshops, aircraft hangers, garages, plant rooms, etc.

Design criteria:

ShieldTop EP is applied as a floor coating system comprising of two top coats (depending on the substrate conditions a primer or sealer might be required), each top coat to be a minimum of 200 microns thick. To provide a slip resistant texture, the first top coat can be dressed with BondChem slip resistant grains of required size.

Advantages:

- Solvent free, odour free, easy to apply by brush, roller, or spray guns
- Durable, low maintenance cost, proven against a wide range of industrial chemicals
- Easy to use for many long lasting applications, Specially formulated for use in Middle East conditions
- Slip resistant - different textures available to suit conditions to avoid slipping
- Available in a wide range of colours to improve the working environment and identify slip hazard areas

Directions for use:

Surface Preparation: All concrete surfaces should be clean, dry and free from contamination. Grind down all surface undulation and fill voids, honeycombs, repair cracks and other surface imperfections by BondChem range of surface repair materials to produce a clean, exposed aggregate finish surface, free from dust, oil, grease, paint, laitance etc. to provide a 'key' for the **ShieldTop EP**.

Primer Application: Stir well both the components into the same container separately, and then pour part B into the container of Part A, and mix well slowly (300-400 rpm) with slow jiffy mixer for 1-2 minutes.

Apply one coat of the mixed material on the prepared surface preferably by short hair roller @ 200 micron.

Topcoat Application: Stir well both the components separately in their containers, and then pour part B into the container of Part A, and mix slowly (300-400 rpm) with a jiffy mixer for 1-2 minutes.

Apply the mixed material on the prepared surface or on the primed surface (if primer applied, make sure that the primer is fully cured) preferably by roller @ 400 micron per coat. A second coat is applied at right angle after the first coat is fully dry. It is recommended to apply two coats of **ShieldTop EP** to get a total dry film thickness of 1.5mm (approx). A third coat may be applied where heavy traffic is expected like ramps and driveways etc.

Anti-slip application: If a slip resistant finish is required, the base coat shall be applied as per the standard

application, but at a minimum film thickness of 250 microns. The base coat should then be dressed with the chosen BondChem slip resistant Grain. Spray the Grains manually @ 1kg/m², immediately over the base coat application in a homogeneous manner and make sure that the first coat is fully covered with grains. Leave the surface to reach the initial cure (12 hours @ 25°C), then the excess aggregate should be vacuum or boomed away from the surface. The top coat can now be applied by medium haired roller @ 400 micron per coat. This top coat must be applied within 36 hours @ 25°C, humidity less than 75%.

Working Time:

ShieldTop EP has a working time of approximately 20 minutes at 25°C after the two parts are mixed.

Typical Properties:

Appearance	: Smooth or Textured
Pot life @ 25°C	: 20 minutes
Volume Solids	: 98 ± 2%
Flash Point	: 100°C
Compressive Strength	: 74N/mm ²
Flexural Strength	: 40N/mm ²
Tensile Strength	: 20N/mm ² (ASTM D638-99)
Water Absorption	: < 0.1%
Shore D Hardness	: 77 – 85 (ASTM D2240: 1996)
Initial Cure	: 12 hours at 30°C
Final Cure	: 72 hours at 30°C
System Thickness	: 1.5 to 2.0mm
Recommended DFT	: 300-400 microns per coat



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Watch Points:

- ShieldTop EP should not be applied on to surfaces known to, or likely to suffer from, rising dampness, potential osmosis problems or have a relative humidity greater than 75% as measured in accordance with BS 8203 Appendix A.
- BondChem does not recommend acid etching as a method of floor preparation. If used, the method should be approved by the project consultant.
- In common with all epoxy materials, some slight shade changes may be experienced over the long term when placed in adverse exposure conditions. Any such change in shade is not regarded as being deterioration to performance.

Pack Size: 1 USG or 5 USG packs

Storage:

ShieldTop EP should be stored in tightly sealed original factory containers. Store in a horizontal position to prevent moisture accumulation on the drum head, protect from freezing and keep out of direct sunlight.

Shelf Life:

18 months if stored in proper storage conditions as per the local regulations. Keep the paint container in sealed condition under shed, away from direct sunlight and extreme temperatures. Do not put back any unused material back in original container.

Handling:

ShieldTop EP is non-flammable and non-toxic in nature. Avoid contact with eyes and skin as it may cause irritation. Splashes of **ShieldTop EP** should be washed off immediately with clean water. Wear necessary gloves and dust mask.

Technical support:

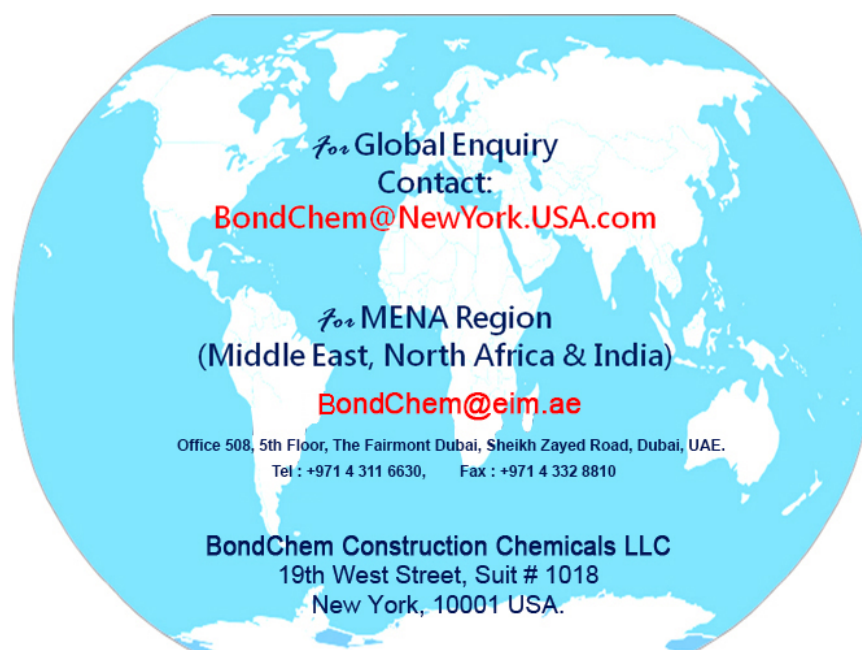
BondChem offers comprehensive technical support service & specification assistance in locations to our channel partners, end users, and contractors.

Quality & Care:

All the products manufactured and originating from BondChem Construction Chemicals' facilities are independently tested and certified under a BondChem Management System to conform with the requirements of the quality, environmental, health & safety Standards.

Health & Safety Precautions:

As a general rule, avoid skin and eye contact by wearing overalls, gloves, goggles, and air mask etc. Spillage on skin should immediately be removed by thorough washing with water and soap or suitable cleaner. Eye should be flushed with fresh water. Avoid inhalation of vapours and paint mist by wearing suitable air mask. In the event of ingestion and eye contact, seek medical attention immediately. Local safety regulations must be adhered to.



Whilst the information and specification given are true and accurate to the best of our knowledge, no warranty is implied in connection with any recommendations made by us, our representatives, agents or distributors as the conditions of use and any labour involved are beyond our control

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