



Flintkote5 Bitumen Emulsion

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Description: Flintkote 5 bitumen emulsion is a single pack, fibrated and stable water-borne emulsion which cures to form a firm and flexible bitumen waterproofing membrane. Flintkote 5 is designed for use on horizontal and vertical surfaces. Flintkote 5 is suitable for use as waterproof membrane on concrete, asbestos cement, roofing felt, mastic asphalt, slates, tiles and metal surface.

(Note: Flintkote 5 was formerly marketed under the brand name Shellkote Type 5, Shell Bitumen Emulsion No. 5 and Weatherkote Type 5. Product quality and performance remain unchanged)

Property	Test Method	Flintkote 5 Bitumen Emulsion
Colour, Wet		Brown (Wet), Black (Dry)
Appearance		Thick, smooth cream
Coverage		0.50-0.75 litre/ m ² per coat depending on actual surface environment and application
Solid Content	SS 133	> 50%
Surface Drying Time	SS 133	About 5 hours, depending on temperature and humidity
Flammability	SS 133	No flashing at 40°C
Heat Resistance	SS 133	No flow, sag or blistering
Flexibility	SS 133	No cracking or flaking
Water Resistance	SS 133	No blistering or re-emulsification
Fire Resistance	SS 133	No combustion or rundown
Elongation at Break	ASTM D412	100%
Adhesion to Substrate	ASTM D4541	0.4 N/ mm ²

TYPICAL VALUES

Advantages

- Easy to use: supplied in single pack so no mixing is required and easy to apply by brush or trowel.
- Built-in short fibre enhances the membrane's toughness and durability
- Designed to form a seamless and lap free membrane over the substrate.
- Designed to be suitable for use over any shape of substrate and easily conforms to protrusions and difficult details.
- Water-based and non-toxic; easy to clean up with water during wet phase.

Cures to form a flexible resilient waterproofing barrier over a wide range of temperatures to withstand thermal movement of the substrate without cracking

No flow or sagging of the film at elevated temperatures even on vertical surface.

Formulated to provide excellent adhesion to the substrate prevents lateral migration of water underneath.

Can be applied to damp surface without standing water such as green concrete surface .

Uses

Waterproofing	Typical applications will include concrete roofs, asbestos cement roof, rejuvenation of asphalt roof, retaining walls, external concrete walls, above - grade floor slabs, bathrooms, kitchens, balconies and planter boxes.
Concrete Protection	To protect concrete from carbonation, spalling and sulphate attack.
Metal Protection	As a protective coating against corrosion of pipes, structural steel works and other metallic equipment.

Application Instructions

Surface Preparation	Surfaces shall be dry, clean, and free from dust, dirt, oil, grease, moss and loose material.
Priming	Prime with Flintkote PF-4 or 1:1 mixture of Flintkote 3 and water . Bitumen Paint at a coverage of 0.1 - 0.15 litre/m ² . Allow to dry prior to Flintkote 5 application.
Membrane Application	Stir the emulsion well before use. Flintkote 5 may be applied by roller or brush for a minimum of 2 coats. Allow to dry between coats and apply each coat at right angles to the previous coat. For maximum durability, the coating can be reinforced with Flintkote Spunbond fabric . Protect from rain and frost until cured. For exposed surface subjected to direct sunlight, apply 2 coats of Flintkote Decoralt on the cured membrane.

Cleaning of Tools

Clean immediately after use with water. Use kerosene or white spirit if the material has dried. During work, place tools in water when not in use.

Storage

Flintkote 5 can be stored for at least 12 months in original sealed containers stored under cover at temperature between 5°C and 40 °C . **Flintkote 5** must be protected from freezing conditions.

Health and Safety

Flammability	Non-flammable
Skin Contact	Occasional contact is unlikely to have any adverse effect except on particularly sensitive skin. As a general precaution, avoid repeated or prolonged contact. Remove skin contamination when wet with water. Use a proprietary hand cleaner if the product has dried.
Eye Contact	Unlikely to cause damage, no special precautions are necessary. However, as eyes are sensitive, contact should be avoided. In the event of accidental contact, irrigate immediately with plenty of water.

Flintkote 5 is unlikely to present significant health and safety hazard when properly used in the recommended application, provided good standards of industrial and personal hygiene are maintained.

Safety Data Sheet

Available on website: www.epc.shell.com

Typical Specification Clause

Liquid applied bituminous waterproof membrane where shown on the drawings shall be **Flintkote 5** Bitumen Emulsion from Shell. It should be used in accordance with Shell's current product data sheet.

Packing

Flintkote5 Bitumen Emulsion	3.5, 18 & 200 Litre
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Complementary Products

Flintkote PF4 Bitumen Paint	3.5, 18 & 200 Litre
Flintkote Decoralt	18 Litre
Flintkote FG4 Fabric	1 m x 100 m per roll

Technical support and engineering options to provide fit-for-purpose applications that meet customer needs and waterproofing requirements are available. For further information, please contact your local Shell office or visit us at: <http://www.shell.com/bitumen>

Note: This data sheet is issued as a guide to use of the product(s) concerned, and whilst every effort is made to ensure the accuracy of the text which is in accordance with the latest technical development we cannot accept responsibility for any work carried out with our materials, as we have no control over the method of application used or condition of site involved.