



DAMPSHIELD TANKING COMPOUND

Issue – DSTC-2/0703

**AVAILABLE IN
GREY OR WHITE**

**ALL IN ONE TANKING COMPOUND
WITH EXCELLENT ADHESION**

**HIGHLY WATER REPELLENT
MOISTURE BARRIER**

DESCRIPTION:

DAMPSHIELD is a single-pack blend of special cements; ultra-fine quartz, pore-blocking water repellent crystals and copolymer based adhesion aids, which readily mixes with water to form a pourable, brushable slurry. This free-flowing mix, readily penetrates the open surface masonry capillaries and engage in a reaction with any available free-lime within the substrate forming expansive, but insoluble pore blocking micro-crystalline structures, achieving a secure and permanent key within the masonry sufficient to repel and withstand the hydrostatic water pressure exerted even in underground structures such as cellars and basements. DAMPSHIELD has been widely used to provide a permanent barrier against penetrating damp in many application both above and below DPC level such as cellars; retaining walls; lift shafts; swimming pools; vaults; tunnels and has also been used to line water tanks and irrigation channels due to it's suitability for use in contact with potable water.

SURFACE PREPARATION:

The success of any DAMPSHIELD tanking application depends greatly upon the preparation of the receiving surface, which must be hard, sound and free from grease, dust and any previous surface coatings, plaster and adhesive residues. The exposed walls and floors must be cleaned back to the base sound masonry, by mechanical means if necessary to ensure the right conditions for DAMPSHIELD to penetrate and form a permanent bond. All worn, friable or damaged mortar joints need to be made good with a REPAIR MORTAR based on a 3 : 1 sand cement mix, incorporating PALACE PLASTERBOND SBR within the gauging liquid as a 1:1 dilution in water.

To ensure a good seal is achieved across any wall to floor joints, the same repair mix can used to form a 1" angled filled, sealing the joint in with any exposed sub-floor polythene DPC and allowing the tanking coat to over-lap to the floor and form a secure, continuous barrier. Very uneven and damaged surfaces may require the application of the REPAIR MORTAR as a render coat over the brickwork to yield a level surface, which is allowed to cure before applying the DAMPSHIELD tanking coats.

In many basement application exposed to years of penetrating damp, there is likely to be a continuing problem with surface salt migration. This will require pre-treatment with a wash coat of PALACE SALT INHIBITOR, which reacts with the soluble salts to form insoluble compounds, which remain locked within the wall and restrict further migration. Areas exposed to heavy salt contamination may benefit from the additional application of a PLASTERBOND SBR slurry coat, prepared by mixing a bonding slurry of one part neat SBR with one part neat OPC and then coating over the salt inhibited wall applied as two consecutive layers to give a sound, even and stable surface ready to receive DAMPSHIELD.

APPLICATION METHOD:

Add the full contents of the DAMPSHIELD sack (25kg) to about 5 litres of clean water and mix with a slow-speed mechanical agitator to a smooth, creamy, lump-free slurry consistency adding small additional quantities of water as necessary. Apply the first coat of the freshly mixed tanking compound onto the prepared surface using a stiff fibre brush, ensuring the strokes are spread in the same direction to give a consistent even layer of no more than about 2mm depth. (Uneven surfaces may benefit from a trowel-applied application, using DAMPSHIELD mixed to a thicker consistency). DAMPSHIELD has an open time of about 30 minutes and once the paste begins to set DO NOT freshen it up with further water additions, but start again with a fresh mix. Mix only sufficient material that can be applied within it's open time and note that at higher temperatures [$> 25^{\circ}\text{C}$] the slurry will set even quicker.

The second coat should be applied only when the first has set firm, (usually within 24 hours), but should be brushed on with strokes at 90' to the first coat to ensure a consistent and 100% covering is achieved over the base substrate.

COVERAGE:

A single coat application of DAMPSHIELD on to a level even wall will cover at about 1.5 kg per square metre, thus for a complete two coat finish, one 25kg sack will cover about 8 square metres of wall surface. Allowance should be made for uneven surfaces, where this rate of coverage will be reduced, to a point that trowel application will cover at about 2.0 to 2.5 kg per square metre per coat.

TECHNICAL SUMMARY:

MIX RATIO:	OPEN TIME:	SETTING TIME:	COVERAGE:
3 parts powder to 1 water	30 - 40 mins	2 - 3 hours	8 sq. metres per 25 kg sack

STORAGE & PACKAGING:

DAMPSHIELD is supplied in 25kg moisture resistant bags and has a storage life of not less than 12 months if stored in dry, un-opened conditions. DAMPSHIELD contains Portland cement and is therefore classified as irritating to eyes and skin. Consult the relevant material safety data sheet for advice on handling and safety procedures.

The information provided by this Technical data sheet is given in good faith and is to the best of our current knowledge true and accurate. However it is given without guarantee, as conditions of use and workmanship involved are both beyond our control. All information supplied is subject to the company's terms and conditions of sale, copies of which are available on request.

PALACE CHEMICALS Ltd
Speke Hall Industrial Estate; Speke; Liverpool; L24 4AB
Tel: 0151 486 6101 – Fax: 0151 448 1982
e-mail technical@palacechemicals.co.uk

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PRODUCT IDENTIFICATION:

DAMPSHIELD TANKING COMPOUND

COMPOSITION:

A Portland Cement (CAS 65997-15-1) based blend of lime, calcium silicates, water repellent additives, graded silica sands; spray dried copolymers; organic additives and super - plasticisers

HAZARDS CLASSIFICATION: IRRITANT

**Contains CHROMIUM VI- May produce an allergic reaction
RISK OF SERIOUS DAMAGE TO EYES**

Contact with wet paste may cause dermatitis, irritation or burns
Wear suitable gloves, clothing and eye/face protection.

Avoid contact with skin and eyes.

Avoid breathing dust. Keep out of the reach of children

On contact with skin or eyes rinse immediately with plenty of water and seek immediate medical assistance after eye contact.

FIRST AID MEASURES:

INHALATION:

Avoid working in a poorly ventilated, confined space. Remove to fresh air and rest. If nose or airways become inflamed or breathing difficulties occur, seek medical attention.

SKIN CONTACT:

Wash off skin immediately with warm soapy water. Remove contaminated clothing and launder regularly. Where irritation to skin is apparent seek prompt medical attention.

INGESTION:

Clean out mouth with copious volumes of water and drink plenty. Do not induce vomiting. Seek medical attention if mouth is inflamed

EYE CONTACT:

An instant response is essential. Irrigate thoroughly for 15 minutes with clean running water or eye wash bottle. Seek medical attention if eye irritation becomes inflamed.

FIRE FIGHTING MEASURES:

NON FLAMMABLE

Recommended extinguishers – Dry powder; Foam, C02 – sacks may support combustion product will not.

Hazardous decomposition when subject to combustion – N/A

Special procedures – N/A

ACCIDENTAL RELEASE MEASURES:

Recover spillages in a dry state wherever possible. Do not allow wet residues to harden. Confine all residues in a clearly marked sealed containers for disposal in accordance with Local Authority regulations for cement-based building products.

HANDLING & STORAGE:

Handling: Lifting operations must be no more than 1 x 25kg sack at a time by a competent operator wearing gloves.
Storage: Store in sealed, clearly marked sacks. Do not stack more than 4 high. Keep out of reach of children in a cool well-ventilated environment, preferably off the ground and out of contact with water

EXPOSURE CONTROL / PERSONAL PROTECTION:

OEL 8hr TWA = 10mg/M3 total inhalable dust - 4mg/M3 respirable dust.

Respiratory:

Good ventilation is always recommended along with a BS approved dust mask

Hand:

Wear 17" long elbow length heavy duty natural rubber gloves or gauntlets approved to EN 374 & EN 420 with a BTT rating of > 8 hrs for strong alkalis

Eye:

Dust proof BS 2092 Goggles or chemical grade visors are also advised wherever there is a risk of dust or slurry entering the eyes.

Skin:

PVC overalls should be worn and laundered immediately after use. Do not work in powder or paste contaminated overalls

SAFETY DATA SHEET No. 044 – issue date 16-06-03

PRODUCT: DAMPSHIELD

PHYSICO-CHEMICAL PROPERTIES:

Appearance – Coarse grey or white particulate powder
Boiling point range – n/a
Solubility – water dispersible
Auto ignition temp – n/a
Specific gravity - 1.45 dry - 2.35 wet
Miscibility – water only
Evaporation rate - N/A

Odour – N/A
Vapour pressure – N/A
Flash point - N/A
Explosive properties - N/A
Viscosity – > 20,000 Mpa.s when mixed to a slurry.
PH - 11.0 - 12.5
Oxidising properties - N/A

STABILITY & REACTIVITY:

Conditions to avoid – n/a
Materials to avoid – Strong acids
Hazardous decomposition products - n/a

TOXICOLOGICAL INFORMATION:

Routes of exposure – Inhalation, skin contact, eye contact and ingestion.
Key Health effect – severe skin burns and destruction of internal mucous membranes

Acute toxicity: severe eye irritant
Corrosivity: Damages skin

Sensitisation: Contact & allergic dermatitis
Mutagenicity: n/a

Carcinogenicity: n/a
Reproductive toxicity: n/a

ECOLOGICAL INFORMATION:

Bio-accumulative potential – not expected to bio-accumulate.
Ecotoxicity: strongly alkali – will adversely affect low volume watercourses
Environmental Persistence – Not likely to remain strongly alkali in contact with water after hydration is complete.

DISPOSAL CONSIDERATIONS:

Dried powder, unused product and freshly contaminated application materials must be considered potentially irritant and disposed of in sealed bags in accordance with local authority regulations for building waste.

TRANSPORT INFORMATION:

Not classified for transport purposes

REGULATORY INFORMATION:

CHIP Hazard symbols: Xi - IRRITANT - Contains CHROMIUM VI- May produce an allergic reaction - R41 - RISK OF SERIOUS DAMAGE TO EYES

Safety phrases: S2 – S24/25 – S36/37/39 - S64 **Other regulatory controls:** Health & Safety @ Work Act 1974; Control of Substances Hazardous to Health Regulations 1994.



IRRITANT

FURTHER INFORMATION:

The information supplied in this safety data sheet is intended to assist in the use of the above product without risk to safety and health and is based on current knowledge and experience of the associated physico-chemical hazards. The data does not signify any warranty with regard to the product's properties. This information may be used to assist in formulating a COSHH risk assessment if applied at work. This data sheet complies with EC Directive 91/155EC.