



FUNGICIDAL WATERPROOFER

Issue date – AWC-1/0403

**PROTECTS AGAINST
DRY ROT**

**INTEGRAL
WATERPROOFER**

**PROTECTS AGAINST
MOISTURE INGRESS**

DESCRIPTION:

An aqueous solution of refined fatty acid based water repellents and sodium silicates for use as a mortar / render water-proofing admixture to give integral water-proofing activity, protecting internal walls against moisture ingress from capillary migration from damp brickwork and in external applications restricting penetrating dampness from rainwater. FUNGICIDAL WATERPROOFER also contains active ingredients to prevent the recurrence of dry rot in masonry previously affected by damp and fungal infestation. It is the ideal product to use in remedial damp-proofing and re-plastering work where the walls and adjoining timbers have shown signs of previous infestation from the dry rot fungus *Serpula Lacrymans*.

FUNGICIDAL WATERPROOFER gives the mixed render improved levels of workability, making for easier placement of mortar, plaster and render across all types of renovated surfaces. The benefits of improved plasticising properties allows for levels of water reduction, which not only reduce the risk of drying shrinkage and cracking, but also results in higher long-term strength development in the hardened mortar.

FUNGICIDAL WATERPROOFER is required when re-plastering internal walls following the installation of an injected damp-proof course. It's effectiveness in increasing the density and water-repellency of an internal render will inhibit the migration of salt-bearing moisture from brickwork above the DPC level, thus leaving the internal walls free to be finished and re-decorated without risk of further damage through dampness. The combination of damp and salt inhibiting properties allied to it's effectiveness in restricting the re-emergence of dry rot makes FUNGICIDAL WATERPROOFER the favoured admixture for remedial re-plastering.

MIX GUIDELINES:

To ensure that FUNGICIDAL WATERPROOFER is adequately dispersed throughout the render / plaster mix, add to all the gauging liquid at a rate of 5 litres per 200 litres of water6ritq



DRY ROT- CODE OF PRACTICE

Issue date – DPC-2/070

RECOGNITION

APPRAISAL

CONTROL

RECOGNITION:

The correct identification of dry rot is important owing to the extensive and elaborate measures necessary to control and eradicate it. The recognition of the various diagnostic features of the timber, mycelium, the strands and fruiting body is important for a positive identification appraisal.

A) Timber

Timber is a cellular material consisting mainly of cellulose and lignin, which provides the timber with rigidity and strength. Dry rot breaks down the cellulose of the timber leaving behind the lignin, which gives the timber a darker colour. This darkening is characteristic of "brown rot".

As the wood breaks down it loses strength and weight and cracking and shrinkage occur. It may also appear warped. The decayed timber splits into cuboidal pieces with deep cracks along and across the grain caused by the shrinkage.

B) Mycelium

Fungal growth is dependent on the development of the hyphae, the fine filaments which elongate and spread through and across the damp timber. As the hyphae develops it forms a larger mass, the mycelium, which can appear as a white, fluffy cotton wool like growth or silvery grey sheets. The mycelium can also be tinged with lemon yellow and lilac patches. The skin or sheet will peel back like a mushroom cap in straight lines. A musty mushroom-like smell may be present especially when conditions promote activity.

C) Strands

White or grey strands, which conduct nutrients and water are formed within the mycelium. These strands, which can be up to 8 mm thick, will allow the fungus to spread over and through inert materials and reach further timbers. This ability must be considered when inspecting a dry rot outbreak. The strands will become brittle on drying and will "snap" audibly. This brittleness will distinguish the strands from other similarly coloured wet rot strands.

D The Fruiting Body (Sporophore)

The fruiting body can be the first indication of dry rot although its development usually follows advanced growth. Shaped like a fleshy pancake or bracket the fruiting body has a centre section covered with wide pores or folds, orange or reddish brown coloured from which spores are produced. These rusty red spores are released into the surrounding area and disperse on air currents as a red dust settling on horizontal surfaces.

APPRAISAL:

Where dry rot is present the inspection must be carried out carefully and methodically. Remove affected skirting boards and floorboards and examine the sub floor area, checking for fungal growths and testing the joists by prodding with a screwdriver or similar implement to determine the depth and extent of decay. Assess the sub floor ventilation checking for a musty mushroom like smell, which may indicate activity and debris, which may promote the spread of the fungus or the germination of the spores.

Check the plasterwork adjacent to areas of decay by removing small pockets to determine the spread of strands behind the plaster. If necessary remove random bricks to examine the cavity for the of the fungus. Determine the cause and source of dampness and rectify to promote drying conditions, paying particular attention to rainwater goods bad pointing flashings and bridged damp proof courses.

Where dry rot comes into contact with a party property the owners or occupier must be notified and if possible an inspection carried out.

CONTROL:

The principal aim in the control of dry rot is to identify and eliminate the source of moisture and dry the building as quickly as possible to reduce the moisture content in the timber to below 20%. This procedure may take a long time and although it forms the basis for eradicating the fungal infestation secondary measures may be required to prevent further damage.

Secondary Measures

Cut out and remove all decayed timber up to 600 mm beyond the visible limits of fungal decay depending on site conditions and severity of the fungal growth.

Remove all built-in timbers, e.g. wall plates, lintels, bonding timbers within the affected area and replace using steel or concrete.

Remove all timber debris from the sub site area and any surface fungal growth, which may be on exposed areas of masonry.

Rake out mortar joints in areas where masonry sterilisation is required and carry out a thorough surface treatment using a coarse spray of Palace fungicidal irrigation fluid applying two or three treatments.

It may be necessary to isolate an outbreak of dry rot by constructing a "cordon sanitaire", a method of drilling and injecting into masonry or brickwork to form a barrier:

- Between an outbreak and timber in the immediate area which is not affected,
- At the base of a wall with no DPC membrane where fungal decay is established in infected wood beneath a solid floor,
- To brickwork where fungal decay by dry rot has affected timbers or masonry in a party wall with adjacent property,
- To isolate and protect built in timbers which may be affected by dry rot but are not readily removable.

Re-plastering of exposed brickwork should be carried out using Palace Fungicidal Waterproofer especially in areas where a severe infection is evident or in a party wall situation where access is not available to both sides of the wall. The replacement timbers should be pressure impregnated and cut ends retreated using Palace Fungicide/Insecticide Wood Preservative. The ends should stand in the preservative for a minimum period of one hour to ensure penetration up the end grain.

Residual sound timber in the area of the outbreak should be cleaned and treated. It is important that the property is well maintained to prevent any ingress of damp and kept in good order.

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.

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PALACE REPLASTERING FOR INTERNAL WALLS FOLLOWING THE PALACE DAMP PROOF INJECTION SYSTEM

Issue date – DPC-2/0703

In a property where rising damp has been present for many years high levels of hygroscopic salts will have built up in the brickwork and the old plasterwork. Hygroscopic salts will absorb moisture from the air, depending on the prevailing atmospheric relative humidity, causing further damp to appear on plasterwork or spoiling decorations. Although a damp proof course can be completely effective damp marks will cast doubt on the efficiency of the damp proof course. It is therefore important to remove the old plasterwork to the relevant height and replace it with a specification that will not only resist the passage of the old residual contaminant salts in the brickwork but also allow the residual moisture to dry out.

THE SPECIFICATION

1) PREPARATION

- A) All timber skirtings and architraves should be removed and radiators disconnected.
- B) Hack off the old plasterwork to a height of at least 300 mm (1 foot) beyond the last evidence of damp or 1 metre whichever is the higher.
- C) Rake out mortar joints to approx. 12 mm to provide a good key for the plaster / render. Wire brush the wall to remove surface salts, loose material or any other deposits as necessary. Remove dust with clean water.
- D) When application is to be made to low suction substrates such as dense brick or stone or tanked surfaces apply Palace Plasterbond as a bonding agent.

2) THE APPLICATION

a) Backing coat, to be 10 mm thick (maximum).

The gauging water should be clean, oil free, suitable for drinking if possible, and containing Palace Intrapruf in the ratio of 1 to 30 or Palace Fungicidal Waterproofing in the ratio of 1 to 40. Prepare 3 parts sand to 1 part cement using the gauging water as above. The sand should be washed, sharp, loam free, satisfying British Standards BS882. The cement should be Portland cement, fresh and free flowing. Use minimum of water to ensure a dense coat, as the waterproofing additive will give a plasticising water reducing effect. Apply to give a render of 10 mm, compacting into mortar joints. When the cement reaches its initial set scratch for a mechanical key and apply the second coat before the backing coat has finally gone off to obtain a satisfactory adhesion.

b) Second Coat.

This float coat should be 10 mm thick giving an overall thickness of 20 mm. The gauging water should be clean but contain no additive. Prepare 4 parts sand to 1 part cement. Scratch to form mechanical key for finishing plaster but do not over-trowel.

c) Finish Coat.

This coat should be 3 mm thick, porous and not over-trowelled. Use Limelite gypsum finishing plaster or similar used to the manufacturers specification.

d) Skirting.

Refit original skirtings (if sound) after treating with Palace Fungicide- insecticide Wood Preservative. For new skirtings treat previously with Palace Fungicide- insecticide wood Preservative.

Note: The render should be kept a minimum 25 mm above solid floors to prevent damp transfer and timber floors to prevent sub floor condensation passing into the new render.

e) Redecoration.

The drying rate for a damp wall is approximately 25 mm per month, depending on conditions, type of masonry and ventilation. This allows a 230 mm wall approximately 9 months to dry out satisfactorily, possibly longer. Initial decoration should be delayed as long as possible giving the drying process a chance to progress. Temporary redecoration should use non-vinyl matt emulsion paint. Wallpaper or oil based paints will reduce permeability and should not be used until the residual moisture has dried out from the walls, a minimum period of 6 months.

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SUBSTANCE IDENTIFICATION:

FUNGICIDAL WATERPROOFER

WATERPROOFING ADDITIVE FOR REMEDIAL DAMP-PROOF RE-PLASTERING

COMPOSITION;

An aqueous solution of sodium silicates and natural fatty acids, incorporating < 0.5% Sodium Ortho Phenyl Phenate

HAZARDS CLASSIFICATION:

IRRITANT Xi – R36 / 38
Irritating to eyes and skin
Keep out of reach of children
Avoid working in a spray mist
Wear suitable protective clothing

FIRST AID MEASURES:

INHALATION:

If inhaled, clear out mouth with clean water and seek medical attention. If irritation or breathing difficulties persist, seek medical attention.

SKIN CONTACT:

Wash off skin with warm soapy water. The dilution will not cause irritation, but prolonged and unattended contact with the mixed mortar should be avoided

INGESTION:

Clean out mouth with copious volumes of water. Do not induce vomiting. Seek prompt medical attention and show this data sheet.

EYE CONTACT:

Irrigate thoroughly for 15 minutes with clean running water or a boric saline eye wash bottle. Seek medical attention should eye irritation persist or become inflamed.

FIRE FIGHTING MEASURES:

This product is a NON-FLAMMABLE water based concentrate.

ACCIDENTAL RELEASE MEASURES:

Absorb spillages on sand, sawdust or absorbent granules and confine residues in a clearly marked sealed container for disposal in accordance with Local Authority regulations for low-hazard water based Building chemicals.

HANDLING & STORAGE:

Store in sealed, clearly marked containers either as a concentrate or in its diluted form. Keep out of reach of children in a cool well-ventilated environment – Protect from frost, heat and direct sunlight.

EXPOSURE CONTROL / PERSONAL PROTECTIVE EQUIPMENT:

Respiratory: Good ventilation is required otherwise use an organic vapour filtered face mask in confined spaces.

Hand: Wear 17" long elbow length heavy duty natural rubber gloves or gauntlets approved to EN 374 & EN 420 with a BTT rating of > 4 hrs for 50% caustic sol'n.

Eye: BS 2092 Goggles should be worn for all applications to help prevent accidental face/eye contact

Skin: A disposable PVC apron should be worn on top of overalls, however if the fabric becomes contaminated these should be laundered immediately.

Issue date: 29-01-02

SAFETY DATA SHEET No. 02FW

PRODUCT: FUNGICIDAL WATERPROOFER

PHYSICO-CHEMICAL PROPERTIES:

Appearance – Blue, semi-viscous liquid.
Miscibility – Water only
Ph – 10.8 – 11.8
Density – 1.025
Odour – Distinctive “soapy” odour.
Viscosity - < 800cps

Boiling point - 101°C
Explosion limits - n/a
Flash Point - n/a
Vapour pressure - N/D
Melting point - n/a
Colour - Pink, translucent

STABILITY & REACTIVITY:

Storage in frost affected conditions or at elevated temperatures will affect the performance stability of the product, however there are no known adverse/unsafe reactions should this product be inadvertently contaminated.

TOXICOLOGICAL INFORMATION:

LC50 – Readily disperses and biodegrades in water, but will cause localised high alkalinity and discolouration
Acute toxicity – Irritating to eyes and skin.

Acute toxicity: Irritates skin
Corrosivity - N/A

Sensitisation: n/a
Mutagenicity: n/a

Carcinogenicity: n/a
Reproductive toxicity: n/a

ECOLOGICAL INFORMATION:

Ecotoxicity – Acute fish toxicity – not known.
Biodegradable in both fresh and salt water.

DISPOSAL CONSIDERATIONS:

Dispose according to Local Authority regulations for aqueous, low hazard alkaline based building chemicals.

TRANSPORT INFORMATION:

Not subject to CPL / ADR restrictions
When transporting overseas, classify as IMO Class 3.3 – Marine pollutant.

REGULATORY INFORMATION:

CHIP Hazard symbols: Xi - IRRITANT:

R36 / 38 - IRRITATING TO EYES AND SKIN

Safety phrases: S2 – S24/25 – S36/37/39 - S64

Wear suitable protective clothing. Do not dispose into ponds or watercourses. The use of this product at work will be subject to an assessment in accordance with the 1994 COSHH regulations.

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.