



TECHNICAL DATA SHEETS

BRICK & SANDSTONE CLEANER

Permashield Brick & Sandstone Cleaner is a chemical cleaner for the removal of dirt and grime from sandstone, unpolished granite, brick and terracotta. It will remove iron stains from masonry and contains agents to prevent iron stain formation on the stone face. It is economical and fast acting, removing dirt and surface discolouration.

Product description

A green acidic liquor which contains less than 12% Hydrofluoric Acid and surface active agents. When adequately diluted, as by the jetting off procedure, the organic agents are all biodegradable. The products should only be used by competent contractors. It contains chemicals to prevent iron stain migration and conforms with BS6270 (The Code of Practice for the Cleaning of Stone and Masonry).

Materials to be avoided

Glass, polished granite, glazed aluminium, zinc, bronze, brass, copper and lead. Permashield Red Sandstone Cleaner preferred for use on red sandstone. Some sandstones may become coloured due to iron migrating onto the stone face where it associates with dirt and carbon deposits. Permashield Brick & Sandstone Cleaner, whilst removing the surface dirt will also remove this old migrated iron colouration. The verification of any colouration changes should be observed during test trial work. The product is not suitable for use on limestone, Portland stone, Bath stone, marble, slate or calcited materials.

Ecology

When diluted, the organic ingredients are biodegradable. Effluent, if washed into the soil, will break down rapidly. If the product is inadvertently sprayed on to plants/vegetation it should be rinsed off. Rinsing with water will prevent permanent damage to plants. Plastic sheeting could be used to protect such plant life. Maximum possible dilution of the chemical should be achieved. No damage has been found to fish when such debris enters rivers and streams, but contractors are advised to consult the appropriate authorities before disposal of water waste debris.

Coverage

Approximately 3-4 sq m/lt.

How to use the product

Establish the detailed method and contact time by means of a test patch. Apply the product by means of a fibre bristle brush working it into the masonry face and leaving a visible coating on the surface. The product may be used as supplied on granites and sandstones but should be diluted at least 50/50 with water before use on brick or terracotta. When diluting Permashield Brick & Sandstone Cleaner ensure that the proportions are not varied and that the container is well stirred. Work to distinct boundaries. Normal contact times would be extended up to 30 minutes maximum. It is preferable to repeat short contact treatments instead of using longer contact times. It is frequently found that better degreasing treatments prior to using Permashield Brick & Sandstone Cleaner greatly improves results.

Protection of Operative

Chemical protective suits are needed along with PVC gauntlets, face shields, head cover and suitable footwear. A bucket of clean water for emergencies should be to hand. Nobody must be allowed to pass underneath or work under cleaning areas. Spillages must be washed down immediately. At the end of the work period, wash down all equipment, eg scaffolding and boards. A Hydrofluoric burns kit should be at hand for the treatment of any acid burns. Only experienced operatives should handle this product.

Pre-cleaning recommendations

Large organic deposits should be removed either by a scraper or by power water jetting. The product should be applied on prewetted degreased surfaces. The prior use of a degreasant is often essential to ensure quick and even cleaning performance. Adequate protection of glass and polished granite is essential.

First aid

See the full instructions given in the COSHH Data which follows.

Safe Handling

At any time when this product is being transported or being used, persons handling or carrying the product should have available a drum of clean water for use in emergencies and Hydrofluoric Acid Antidote Gel for immediate treatment of accidental splashes or burns. Containers should be stored in a safe place with caps secured and a trained responsible person detailed for security in depots, in transit and on sites. Spillages must be dealt with immediately. Only competent persons should handle this product.

Application

Shake well before use. Apply by brush or roller. Apply one coat of Permashield Stabilising Primer liberally to a small test area. If this dries to a glossy film, thin with a small quantity of water to two parts stabilising primer and then test again on another small area. If a glossy film still results, try a blend of equal parts of water and stabilising primer. It is important to ensure that a non-glossy, dried sealed surface is produced.

Health & Safety Information

When empty, containers should be filled with water and then emptied and disposed of in an approved manner.

COSHH DATA: Permashield Brick & Sandstone Cleaner

Hazardous ingredients: Contains Hydrofluoric Acid (less than 12.5%) UN 1790. Splashes on the skin can cause serious burns

Physical data: Green, aqueous liquid

Solubility: Totally soluble in water S.G at 20°C: Green, aqueous liquid pH: Less than 1

Flammability: Non flammable

Fume hazards: Hydrogen Fluoride If applying by spray use breathing protection equipment. Not to be mixed with Permashield Algaecide or dangerous fumes may be given off.

Handling precautions: Full body, hands, feet and face protection must be worn. A container of clean water, for emergency use should be on hand. Operatives must have HYDROGEN FLUORIDE BURN ANTIDOTE GEL to hand.

Treatment for Hydrofluoric Acid Burns

First Aid: Immediately wash the burnt area with copious amounts of water for 1 minute. Apply calcium gluconate gel on and around the burn and massage it in with clean fingers (should calcium gluconate gel not be immediately available, continue washing with water until it is available). Continue

to massage in the gel, using repeated applications until 15 minutes after the pain in the burn has subsided, or until medical treatment is available.

Medical Treatment: Continue inunction with repeated applications of the calcium gluconate gel until 15 minutes after the pain has subsided. This may require several hours but so long as improvement in the lesions and symptoms is occurring, massage with the gel should be continued. In cases where a thick necrotic coagulum has formed, it may act as a barrier and prevent the penetration of the gel. This will be indicated by lack of improvement. In those cases, the necrotic tissue should be exercised and the gel massaged into the base of the burn taking usual aseptic precautions. If the burn fails to respond to the calcium gluconate gel, injection of a sterile 10% solution of calcium gluconate (Sandoz) into and under the burn should be considered. Relief of pain is an indication that sufficient solution has been injected. Because of this, an anaesthetic should not be given except in situations where the skin is tightly adherent to the underlying tissues, for instance, the finger pads or in subungual finger and toe burns when splitting or removal of the affected nails may be required. In these cases a general anaesthetic should be given as local anaesthetic is contraindicated. Subsequent magnesium oxide paste dressings are not indicated but if dressings appear to be required, use the gel for 24 hours. After the gel or injection treatment has relieved the pain, it may recur later, especially in the case of burns from dilute acid. The patient should be advised to return for further treatment if the pain recurs. Treat symptomatically.

General In large area skin burns, systematic administration of calcium and/or magnesium may be necessary. Six effervescent calcium tablets (Sandocal tablets, Sandoz each containing 400mg calcium and 20mg ascorbic acid) should be given in water by mouth every 2 hours until admitted to hospital. The hospital should be reminded that serum calcium and/or magnesium may have to be replaced intravenously if indicated either by clinical signs e.g. carpopedal spasm, or by electrolyte monitoring (which should be done frequently) and if calcium gluconate is to be given intravenously it should be administered slowly.

Eye Splashes: First Aid Irrigate with isotonic saline or water for at least 10 minutes. Obtain medical treatment.

Medical Treatment: Continue irrigation with isotonic saline or water, until the severe pain of the burn is relieved. Instil several drops of sterile calcium gluconate 10% solution (Sandoz) Treat symptomatically

Spillages: Dilute with plenty of water or cover with soil/sand and dispose of the debris in an approved manner.

Disposal: Ensure adequate dilution before discharge to drains.

Disclaimer: The information given in this Data Sheet is for guidance only and is correct to the best of our knowledge. Any person using these products does so at their own risk and we cannot accept liability for the performance of the product, nor for any loss or damage. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not considered a warranty or quality specification.