



Guidelines for Stain Removal from Granosite Textures

Applicators skilled in the use of Granosite products and systems may be called on to provide advice as to the method of removing stains from Granosite textures and should this occur, it must be remembered that it is always advisable to consult a specialist, eg. an industrial chemist, for technical advice on stain removal.

The guidelines given below are offered by the manufacturer as **suggestions only** to assist in stain removal. Naturally each situation requires special care and consideration.

1. Chemical Agents for Stain Removal

WARNING: The manufacturer cannot take responsibility for the application of these procedures and warns that careful attention **MUST** be given at all times to safe practices when using chemicals.

You are advised that all applications of chemicals require the wearing of gloves, highly ventilated conditions and care to avoid any eye or skin contact, inhalation or ingestion. Should any contact, inhalation or ingestion occur, seek immediate medical attention.

| Potential Stain Removers | Potential Dangers | Dangerous Goods Class | Haz Chem Code |
|---|-------------------------|-----------------------|---------------|
| a) Hydrochloric Acid (muriatic acid, also called Spirit of Salts) | Poison, corrosive | 8 | 2R |
| b) Citric Acid (powder) | Corrosive | - | - |
| c) Oxalic Acid | Poison, corrosive | - | - |
| d) Caustic Soda (Sodium Hydroxide) powder | Poison, corrosive | 8 | 2[R] |
| e) Ammonia (liquid) | Poison, corrosive | 8 | 2P |
| f) Sugar Soap (powder) | Poison, skin irritant | - | - |
| g) Mineral Turps (liquid) | Poison, flammable | 3 | 3[Y] |
| h) Methylated Spirits (liquid) | Poison, flammable | 3.3 | 2[S]E |
| i) White Spirit (liquid) | Poison, flammable | 3.2 | 3[Y] |
| j) Hydrogen Peroxide (liquid) | Poison, oxidising agent | 5.1 | 2PE |
| k) Glycerine (liquid) | - | - | - |
| j) Commercial Bleach (liquid) | Poison, oxidising agent | 5 | 2PE |

Particular care must be taken to observe the action of these chemicals on texture finishes and no cleaning should be undertaken without preliminary testing in areas where the results will not be visible if the coating should be damaged.

DO NOT MIX CLEANING PRODUCTS / SYSTEMS IN COMBINATIONS OTHER THAN THOSE RECOMMENDED.

2. Stain Identification

Broad guidelines for stain identification are as follows:

- a) Yellow or brown stains are likely to be iron, rust, resin or tannin stains from timber derived materials.
- b) Oil stains are characteristically oily in appearance but eventually become yellow or dark brown.
- c) Copper or bronze stains may be blackish or even dark brown (due to manganese content in the metal).
- d) White stains are probably salts drawn from concrete or cementitious substrates.

3. Stain Treatment

It is essential that stains be identified and removed **while fresh**.

After employing a stain remover, make sure that the area is washed down with clean water, carefully shielding all areas in the vicinity of the stain from contact with stain removal materials.

Three general methods of stain removal are suggested:

- a) By application of a chemical agent to the surface which will remove superficial stains by mild rubbing.
- b) By dissolving staining matter and drawing it out of the coating by application of a "poultice", made by mixing the recommended active agent with calcite or talc to form a paste and applied 6-12mm thick.

After reacting, the poultice is removed for disposal.

- c) By application of an active agent which converts the stain into a form which is no longer visible.

Here is a list of the most common causes of staining and some suggestions for treatment, scroll down the page to find out more.

- Stains of Unknown Origin
- Blood (Fresh)
- Blood (Dried)
- Bitumen's and Tars
- Coffee and Tea
- Copper and Bronze
- Fire
- Fruit
- Grass
- Grease
- Insoluble White Deposits
- Iron or Rust
- Mildew and Organic Growth
- Mud
- Oil Stains and Form Oil
- Stains coming through a Granosite Texture Coating.
- Tobacco
- Urine
- Vanadium
- Wood

- **Stains of Unknown Origin**

Probably the best all-round agent to use for unidentified stains is a commercial bleach or hydrogen peroxide mixed to form a poultice with calcite or talc.

As an alternative, modern enzyme-based cleaners may also be effective in removing these stains.

Warning: Bleaches and Hydrogen Peroxide are poisonous and oxidising agents. Take care to avoid contact with the skin or coloured or organic material.

- **Blood Stains (Fresh)**

Only cold water must be used on fresh blood stains.

A saline solution of one tablespoon of salt to 500 mls of cold water may be used but a faint yellowish mark may remain.

Follow up with a bleach of diluted hydrogen peroxide (one (1) part hydrogen peroxide to four (4) parts water). For 250 mls of the diluted hydrogen peroxide, add two (2) teaspoons of ammonia, taking particular care to test on a hidden area before widespread use.

As an alternative, modern enzyme-based cleaners may also be effective in removing these stains.

Warning: Bleaches and Hydrogen Peroxide are poisonous and oxidising agents. Take care to avoid contact with the skin or coloured or organic material.

- **Blood Stains (Dried)**

These stains are particularly difficult to remove if allowed to dry out, but a weak saline solution of half a teaspoon of salt in 250 mls of water should be applied as a poultice with talc (or preferably pepsin powder if possible).

Apply while wet and leave the poultice for 10 minutes. The stain should then be treated as for fresh blood stains.

As an alternative, modern enzyme-based cleaners may also be effective in removing these stains.

- **Bitumen's and Tars**

Tar stains should be removed while the stain is very fresh, before the tar or bitumen has congealed.

Turps or White Spirits should remove them, but particular care should be taken that the coating is not adversely affected.

DO NOT SMOKE WHILE USING FLAMMABLE SOLVENTS

If the stain has dried, it is necessary to use a pad of cotton wool soaked in the solvent, then wash with soapy water.

It should be pointed out that this is a very difficult problem once the tar has penetrated the surface of the coating, and should not be attempted without the approval of the client.

When slow combustion stoves or heaters are connected to brick chimneys, volatile tars can be distilled and then condense onto chimney surfaces.

These tars are readily absorbed into the surface and drawn through the parging of the flue, through the mortar and bricks by capillary action.

The client should be informed that this source of tar staining may require rebuilding of chimney brickwork.

- **Coffee and Tea Stains**

A poultice may be made using a cloth soaked in glycerine, diluted with four (4) times its own volume of water and left applied to the stain for several hours.

As an alternative, modern enzyme-based cleaners may also be effective in removing these stains.

- **Copper and Bronze Stains**

Mix one (1) part muriatic acid (hydrochloric) into two (2) parts ammonia and make a poultice with talc.

DO NOT use calcite to make a poultice with acid.

Apply the poultice and allow it to remain on until dry, repeat the operation if necessary.

Warning: Muriatic acid is corrosive and goggles and gloves should be worn when handling the concentrated acid.

- **Fire Stains**

Coatings may deteriorate through exposure to fire and should be removed and replaced where possible.

Fire stains are usually very difficult to remove, but some deposits from the fire may be removed by:

a) first washing with a detergent in warm water and

b) Washing again with a solution of one (1) part strong hypochlorite bleach to two (2) parts water.

Warning: Bleaches and Hydrogen Peroxide are poisonous and oxidising agents. Take care to avoid contact with the skin or coloured or organic material.

- **Fruit Stains**

Apply cold water to the stain or mark, dry thoroughly and then wipe with a clean cotton cloth moistened with methylated spirits.

DO NOT SMOKE WHILE USING FLAMMABLE SOLVENTS

(Do not use warm water as this is likely to "set" the stain)

- **Grass Stains**

These must be treated while still fresh and can be very stubborn if neglected and allowed to "set". Mix two (2) parts methylated spirits, one (1) part ammonia and three (3) parts hot water (not boiling).

Apply while the solution is hot in liberal quantities and sponge thoroughly.

DO NOT SMOKE WHILE USING FLAMMABLE SOLVENTS

As an alternative, modern enzyme-based cleaners may also be effective in removing these stains.

- **Grease Marks**

Household bleach or detergent should be tried, and if this is not successful, as a last resort try - White Spirits.

DO NOT SMOKE WHILE USING FLAMMABLE SOLVENTS

Adequate ventilation must be maintained to prevent build-up of poisonous and flammable vapours.

Warning: Bleaches and Hydrogen Peroxide are poisonous and oxidising agents. Take care to avoid contact with the skin or coloured or organic material.

- **Insoluble White Deposits**

These hard, white deposits cannot be removed by washing with water. They usually occur when lime has been leached out of cement render, precast concrete, insitu concrete etc.

The lime combines with carbon dioxide from the atmosphere and forms an insoluble calcium carbonate crust.

An insoluble white crust can also form as a result of acid cleaning, especially on darker bricks when too much acid has been used and too little water.

The acid reacts with the mortar and is absorbed into the surface of the brick. This is particularly prevalent where "fatty" mortars are used which contain clay-bearing sand. The clay combines with calcium and silica residues of the cement to give a very hard white film.

Wet the surface with water.

Apply muriatic acid solution (one (1) part acid with (9) parts water) using a 2-knot grass brush (as used by plasterers) tied with copper wire to stiffen. If necessary repeat the acid wash.

Finally, wash the surface free of acid by hosing down with clean tap water.

Warning: Muriatic acid is corrosive and goggles and gloves should be worn when handling the concentrated acid.

- **Iron or Rust Stains**

These are very penetrating stains and poultice treatment will be necessary for even a pale stain. Make a poultice with talc, mixed with equal parts of water and glycerine and include about 10% of citric or oxalic acid.

This action is intended to convert the stain into a form which does not show and repeated treatment over a few days may be necessary.

Warning: Oxalic acid is corrosive and poisonous. Avoid ingestion and contact with skin.

- Mildew and Organic Growth (Fungi, Lichens, Moulds and Mosses)

Unightly micro-organic growths (fungi, lichens, moulds and mosses) can occur in areas where moisture and prolonged or high humidity is present on either interior or exterior surfaces, but these usually require the absence of light or at least partial shadow for growth.

They appear as dark stains and may penetrate below the surface of a film.

These stains are much easier to remove when new and very difficult to eradicate when dried out.

First dry the affected area, clean and brush away any organic material and sterilise the area with a solution of one (1) part hypochlorite bleach and two (2) parts water.

Next, apply a strong fungicidal wash, scrubbed well into the surface. Allow it to act for three or four days.

After the surface is dry, it should be washed with a scrubbing brush and fresh water.

Warning: most fungicidal surface preparations are poisonous and the applicator must wear protective gloves and goggles, washing hands with soap and water immediately after use.

- **Mud Stains**

As these stains are dust mixed with water, it is best to let the splashes dry and dust them off, either with a stiff brush or a light touch of steel wool and then use one of the patent household cleaners.

- **Oil Stains and Form Oil**

As soon as oil is spilled on the substrate, it should be removed.

Linseed oil and other drying oils may be removed quite easily before they have been oxidised by the air.

Vegetable oils (peanut, castor, linseed etc.) may be treated with methylated spirits or turpentine. Form oil on concrete may be removed by washing thoroughly with detergent and hosing down with water.

DO NOT SMOKE WHILE USING FLAMMABLE SOLVENTS

Adequate ventilation must be maintained to prevent build-up of poisonous and flammable vapours.

- **Stains coming through a Granosite Texture Coating.**

Where stains come through a Granosite texture coating which were not visible before a job commenced (e.g. hardwood stains etc.) let the coating dry, apply a coat of GranoGlaze Gloss diluted three (3) parts Glaze, one (1) part water

After the GranoGlaze is dry, repeat the Granosite texture application.

- Tobacco Stains.

Treat as for Fire Stains

- **Urine Stains.**

Mix three (3) teaspoons of hydrogen peroxide and one (1) teaspoon of ammonia with 250 mls of lukewarm water and apply to stained coating area.

Flush area well with clean water after treatment.

Warning: Hydrogen Peroxide is poisonous and an oxidising agent. Take care to avoid contact with the skin or coloured or organic material.

- **Vanadium Stains**

Bricks that have been made using clays of the lighter colours may contain vanadium salts which can appear as a yellow, green or reddish brown stain on the brickwork.

Do not take the risk that overcoating will solve the stain problem. Treat the areas before the application of texture systems.

Do not use hydrochloric acid to remove these stains, as it may turn them black and make them more difficult to remove.

Try oxalic acid or hypochlorite type bleaching agents, caustic soda or a poultice of one of these agents for very bad staining.

Warning: Oxalic acid is corrosive and poisonous. Bleaches are poisonous and oxidising agents.

Avoid ingestion and contact with the skin or coloured or organic material.

- **Wood Stains**

Certain types of wood, hardboard, or paper may produce brownish stains.

The wood need not contact the surface, e.g. if rain water drips from timber overheads.

Treat as for Fire Stains

The action of the treatment can be speeded up by first scrubbing the surface with a solution of one (1) part glycerine and two (2) parts water, being careful to check that the coating is not being adversely affected.