



Amended Jan 2025

DATA SHEET - CHEMSTAIN

DESCRIPTION:

Africote Chemstain's are inorganic chemical solutions that penetrate raw concrete or plaster and react with the mortar to produce insoluble UV resistant pigments. They achieve the natural stone beauty as found in nature's own rock and slate formations.

SUGGESTED USES:

Applied to Africote Hardcote or Smoothcote and bond, which was specially developed for floors and Chemstains. Cement and concrete pots. Raw concrete and plastered walls. Cement screeds. Not older than 6 months. New floor screeds can be divided into "tiles" or crazy paving patterns and then stained with a combination of Africote Chemstain's to achieve natural slate effects.

Preparation:

A new slab or screed must be well cured for a minimum of 28 days. Make sure the surfaces are free of oil, grease, shutter release oils, dirt etc. before coating. Ensure the floor surface has no rising damp, as the moisture will be trapped under the sealer and eventually discolour the Chemstain. Discolouration will be more pronounced in areas with more rising damp. A reasonable test for rising damp is to place a large piece (½ meter x ½ meter) of flexible plastic on the concrete surface overnight. (12 hours or longer) Remove plastic to see if area looks darker or damp.

NB: Dampen surface with clean water, allow to air dry for 5 minutes and apply first coat of Chemstain. This prevents roller marks. That once they show up you cannot remove.

Application:

Apply with a block brush, roller or broom. **Apply more Chemstain in areas where you want more colour development. Repeat above procedure once dry if a more intense colour is required.**

Chemstain can be rolled or puddled as per your desired result. The ageing and colour development process takes place over a 24 hour period. After the colour has fully developed use a soft broom or vacuum cleaner and sweep the powder residue, ensuring all the powder is removed. Do not mop or wet the surface.

Suggested combinations:	1 coat Bark	plus 1 coat Rust	= rust terra cotta
	5 coats Bark		= soot black

**The combinations are unlimited; experiment to produce your desired colour and effects.
Remember to allow a minimum of 2 hours in summer between coats.**

Precautions:

Power floated surfaces will likely not stain. The same applies to steel trowelled surfaces where neat cement has been used to get a smooth finish.

To overcome this acid, wash the steel trowelled surface with Africote Acid Edge see relevant datasheet. Rinse off the acid thoroughly with clean water and allow to dry before applying Chemstain as detailed.

Do **NOT** mix the Chemstain solutions before application. Note that surfaces older than about 6 months may not react with Chemstain. If possible, test a small area to ascertain. The final colour is dependent on the porosity & cement content of the substrate. The more absorbent areas will be darker than the less absorbent surfaces.

Other factors influencing the final colour are: The age of the concrete surface as well as exposure to the elements. Amount of cement used in the mortar. Concrete or screed that is hand mixed. How many treatments and in what order the Chemstain is applied. All these factors will enhance the natural weathered effect and look of the product.

Sealing: Twin Pack Polyurethane sealer.

2 coats are required add the hardener as per the data sheet. Always roll the 1st coat in the same direction. For the second coat finish rolling at 90 degrees to the 1st coat. Any uneven application will be very visible on the floor in reflected light. Wait for a minimum of 36 hours (extra 12 hours) before applying the second coat of Twin pack sealer. Twin pack sealer gives a gloss finish but after several sweeps and mops becomes satin.

Note that the sealers will darken the colour of the Chemstain by about three shades.

Spread Rate:	8 to 10 sq. m. per litre per coat depending on surface and porosity.
Packaging:	1, 5 and 20 litre plastic containers.
Shelf Life:	18 months. Some settling in the bottles will occur. This is normal. Shake before use. Note that the Chemstain RUST solution is a light green liquid when manufactured. It is prone to a certain degree of oxidation and can turn a rust yellow colour on standing. This will not affect the performance of the product.
Storage:	Store in cool dry conditions. Keep container closed.
Health & Safety:	Use rubber gloves and goggles when applying. Keep out of the reach of children.
Eyes:	Wash immediately with water and consult a doctor.
Washing Tools:	Clean Water

HEALTH AND SAFETY: Contact with product may cause irritation to sensitive skin. Wear suitable hand and eye protection.

FIRST AID:

EYES: Do not rub. Flush with plenty of water. Seek medical advice.

SKIN: Wash thoroughly with soap and water. Wash immediately after handling. If condition develops seek medical advice.

NB: **No** claims will be entertained where applications are done using other manufacturer's products in combination with Africote products. This includes bonding liquids, filler coats, sealers, undercoats etc.

NB: Due to ongoing research and development undertaken on our coatings and the application process, coupled with technological advances in the industry, please consult our factory to ensure you have the latest Data Sheet.