



Product Information Sheet

March 2014

Sodasil / Ceramic Paper Membrane

Description

Sodasil is an inorganic silicate-based solution used as a primer and membrane coating in corrosive environments. It is a single component solution that is air drying and is typically used in conjunction with a glass fibre matting for enhanced structural strength.

Typical Uses

Sodasil is recommended as a primer/coating on concrete substrates for corrosive environments. In particular for general tiling / masonry work and for trenches, pits and storage areas that are exposed to high temperatures (<900°C). Care should be taken in exposure to variable temperature environments where moisture is present. Freeze-thaw variances can lead to premature disintegration of the coating.

Advantages

Sodasil displays excellent chemical resistance to literally all acids (except hydrofluoric) and is recommended for all applications with sulphuric, other strong oxidising acids and solvents. Sodasil also displays excellent resistance to organic materials such as solvents and oils. Easily applied with paint brushes or rollers, Sodasil can perform up to refractory temperatures of 900°C. Where higher temperatures are required, please contact ACCS Ltd for alternatives.

Chemical Resistance

Full details are available on ACCS website: www.protectivelinings.co.uk. Sodasil will not withstand hydrofluoric acids, concentrated bases or crystallising salts.

Surface Preparation

For all pre-existing surfaces of metal or concrete, abrasive blast or scarify to remove all laitance and surface contaminants. The surface should be dust-free and dry and the ambient temperature should be above the dew point of air. Apply the silicate solution by painting the substrate surface with silicate solution. To provide enhanced strength, embed a glass fibre matting into the silicate solution and allow to fully dry. Then apply a further coating of silicate solution on top of the membrane.

Application

Application should be made using either paint brushes or paint rollers. All tools and equipment should be cleaned off with excess water and damp cloths to ensure their continued use.

Pot-Life

An initial set occurs approximately 12hours after exposure to air, with light foot traffic permissible after 24hours and with a full chemical cure occurring after 5-7days. Sodasil should never be exposed to water, steam or chemical environments before the primer is completely cured.

Note: Do not use more material than required by pot-life. It cannot be reconstituted. Never add unapproved materials to the mix, in particular Portland Cement or excess water.

Coverage

Typical primer coverage on a relatively smooth concrete surface is 1.5kg/m² at 1mm thickness. Values are approximate requirements.

Standard Packing

Solution – 34kg in 25L UN drums (24 per pallet)

Storage

Store in a cool, dry, frost-free place. Normal storage conditions in up to 25°C should provide shelf life of:

Solution – 12 months

Do not store a combined stack of solution and powder components. Accidental leakage could lead to flash setting of material.

Safety

Safety data information available on request. Adequate ventilation must be provided whilst work is in progress and is compulsory for closed or indoor applications. The instructions on storage, fire and explosion are to be observed. No releases to the sewers or drains are to be permitted under any circumstances. Always refer to MSDS data sheets for hazard and transport information.



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Warranty

We warrant that our products will conform to the description contained in the order and that we have good title in all goods sold. WE PROVIDE NO WARRANTY, WHETHER OF MERCHANTABILITY, FITNESS FOR PURPOSE, OR OTHERWISE, EXPRESS FOR IMPLIED, OTHER THAN AS EXPRESSED SET FORTH HEREIN. We are glad to offer suggestions or to refer you to customers using ACCS Ltd cements and compounds for similar applications. Users shall determine the suitability of the

product for intended application before using, and users assume all risk and liability whatsoever in connection therewith regardless of any suggestions as to application or construction. In no event shall we be liable hereunder or otherwise for incidental or consequential damages. Our liability and your exclusive remedy hereunder or otherwise, in law or in equity, shall be expressly limited to our replacement of non-conforming goods at our factory or, at our sole option, to repayment of the purchase price of non-conforming goods.

Technical Data

Sodasil Solution		
Parameter	Unit	Value
Density	kg/m ³	1500
Equivalent °TW		100
Mean weight ratio SiO ₂ : Na ₂ O	%	2.00
Mean Na ₂ O	%	14
Mean SiO ₂	%	28
Total Solids	%	42.1
Viscosity at 20°C	cP	200
pH of Product	pH	14
Maximum Operating Temperature	°C	900

Ceramic Paper		
Parameter	Unit	Value
Density	kg/m ³	180-240
Colour		White
Classification Temperature (at which permanent linear shrinkage does not exceed 4% during 24hours continued exposure)	°C	1250
Melting Point	°C	1800
Fibre Diameter	Microns	2.0-3.0
Tensile Strength	kPa	>550
Thermal Conductivity	W/m ² K	
600 °C		0.08
800 °C		0.11
1000 °C		0.16
Permanent Linear Shrinkage (24 hours at 1250 °C)	%	3.59
Chemical Analysis	Fibre wt%	
SiO ₂		48.0 – 54.0
Al ₂ SO ₃		46.0 – 52.0
Alkalis		<0.25
Fe ₂ O ₃		<0.1
Binder Content		≤10.0

Disclaimer

The technical data contained in this document represents the current state of our product knowledge and is for information purposes only. It does not constitute a guarantee or specification.