

# CORROCOAT

## GRAPHITE 'S'

TYPE:	AN ELECTRICALLY CONDUCTIVE TWO PACK COLD CURED ACRYLATED ESTER SYSTEM LOADED WITH FLAKED GRAPHITE.
SUGGESTED USE:	Used in immersed environments for protection in base solutions or solutions aggressive to glass such as Hydrofluoric Acid. The product is a good microwave absorber and has good self-lubrication properties both wet and dry. Useful as a first coat on concrete to enable spark testing and as a conductor layer for preventing static build up. It can be used as a surface veil to other Corrocoat products.
LIMITATIONS:	Limited abrasion and erosion resistance.
HEALTH & SAFETY:	Before handling or using this product the material safety data sheet should be read and all precautions observed.
SURFACE PREPARATION:	The surface to be coated should be free from grease etc. Metal should be grit-blasted to a minimum Swedish Standard SIS 05 5900 SA 2.5 with a grit profile of at least 75 microns, 100-125 microns being ideal. All blast residues should be removed by sweeping clean and vacuuming where necessary. Coating of the substrate should then take place as soon as possible. Concrete should be pre-primed. For full Surface Preparation details see relevant Surface Preparation Specification Sheets.
APPLICATION EQUIPMENT:	45:1 ratio airless pump fitted with 10mm nylon lined hoses. Spray gun should be fitted with a clean by reversing tip in the range 40 to 60 thou. As a guide, a typical tip size would be 47 thou with a 60° fan pattern. The size of tip and fan pattern will vary dependent upon the nature of the work. May also be applied by brush.
MIXING RATIO:	98:2 parts base to hardener. For mixing instructions use the Polyglass Application Data Sheet. This product behaves in a similar manner, but the addition of inhibitor should only be made after first checking the suitability with Corrocoat.
POT LIFE:	Approximately 1 hour 10 minutes at 20°C. Pot life will decrease at higher temperatures and increase at lower temperatures. Seek the advice of Corrocoat UK for availability of inhibitor.
APPLICATION:	When used on its own Graphite S should be applied in at least two layers to a minimum DFT of 1000 microns. Each coat should be applied to a WFT between 600 and 1000 microns by multi pass wet on wet spray technique. When used as a surface veil for Corroglass materials it should also be applied in two coats to a DFT of 500 microns with the Corroglass/Graphite combination being not less than 1000 microns in total. <b>Do not add dye to this product.</b>
THINNERS:	<b>DO NOT THIN.</b> The addition of Styrene may substantially affect the chemical resistance of this product, particularly where post curing is not carried out. <b>NO OTHER DILUTENT OR THINNER SHOULD BE USED. THE USE OF ACETONE OR SIMILAR THINNERS WILL SEVERELY AFFECT PRODUCT PERFORMANCE.</b>
PACKAGING:	10 and 20 litre composites.

STORAGE LIFE:	6 months stored at temperatures below 20°C and away from heat sources and direct sunlight. Frequent temperature cycling will shorten storage life. See other information for extension of shelf life.
COLOUR AVAILABILITY:	Black only.
RECOMMENDED DFT:	1.0 to 3.0mm in multiple coats. 500 microns when applied under or over other Corrocoat products.
THEORETICAL SPREADING RATE:	1 m <sup>2</sup> /litre @ 1mm
VOLUME SOLIDS:	This material contains volatile liquid convertible to solids. Volume solids obtained will vary dependent upon polymerisation conditions. Nominally 99.3% of the contents are convertible to solid.
PRACTICAL SPREADING RATE:	0.71 m <sup>2</sup> /litre @ 1mm Note: This information is given in good faith but usage may vary dependent upon environment conditions, the geometry and nature of work undertaken and the skill and care of application. Corrocoat accept no responsibility for any deviation from these values.
SPECIFIC GRAVITY:	1.24 gms/cc.
FLASH POINT:	28°C.
CATALYST TYPE:	Methyl Ethyl Ketone Peroxide Corrocoat Type P2.
MIXING RATIO:	98:2 base to catalyst.
HARDNESS:	32 Barcol (approximate)
ELONGATION:	0.9%.
THERMAL CONDUCTIVITY:	3.98 W/m <sup>2</sup> K
TEMPERATURE LIMITS:	110°C immersed. 175°C non-immersed. No lower limit.
OVERCOATING:	May take place as soon as previous coat has gelled sufficiently to resist movement of next application and whilst still tacky. Maximum overcoating without treatment: 4 days: Shorter at ambient temperatures above 30°C. Once the maximum overcoating time has been reached, adhesion values attained by any subsequent coat will reduce dramatically. It is important to observe maximum overcoating times and note these will vary with climatic conditions. Any further application of coating at this juncture should be treated as a repair, with the surface flash blasted to provide a physical key.
CLEANING FLUID:	Acetone or Methyl Ethyl Ketone before gel.
CURE TIME:	At 20°C, 90% cure will be attained within 8 hours. Full cure for chemical resistance will be 6 days. Cure time may be shortened and a beneficial increase in final cure may be attained by heat treatment. Consult Corrocoat UK for specific information. Although not fully cured, after gel has occurred, this product may be immersed in some environments without detriment to the coating.

All Values are approximate.

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***This information is offered in good faith but without guarantee or liability***