

MS Geocel® 945

HIGH MODULUS ELASTOMERIC CONSTRUCTION SEALANT & ADHESIVE

Geocel®945 is a one part high modulus MS Polymer based sealant and adhesive for building and civil engineering structures.

- Fast cure
- Abrasion resistant
- Resistant to aerobic and anaerobic bacteriological attack
- Excellent application characteristics
- High strength adhesive bond
- Permanently flexible

PRINCIPAL APPLICATIONS

For sealing movement joints to:

- Building sub structures
- Culvert and bridge assemblies
- Concrete road soak away channels
- Concrete floor slabs (Saw cuts)
- Internal stone flooring
- Expansion joints in water retaining structures

Geocel®945 can also be used for industrial applications including: -

- Floor plates
- Skylights
- Anti-vibration locking of nuts and bolts
- Air conditioners
- Gaskets and profiles
- Lap seams
- Vehicle cabs

SPECIFICATIONS

BS ISO 11600-F-25HM

ASTM C1248-93 for non staining

BS 6920 for Potable Water

Manufactured under ISO 9001



DESIGN IMPLICATIONS

Geocel®945 has a movement accommodation factor (MAF) of 50%. The sealant can be applied into joints 6mm to 40mm wide and a depth of 6mm to 25mm. Generally the joint slot should be designed to ensure that the sealant width to depth ratio is between 1¹/₂ :1 and 2:1.

Where joints are subjected to traffic a width to depth ratio of 1:1 should be adopted. For joints with high casting and setting out tolerances, the joint depth should be a minimum of 10mm with accurately formed joints in metal, a minimum 6mm.

TECHNICAL DATA

Form	Smooth void free viscous paste
Storage Life	Stored below 25°C, in original containers 290ml cartridges - 9 months 600ml sausages -12 months
Solids Content	100%
Colour	Grey, White, Black, Concrete Grey, Buff
Application Temperature	5°C to 40°C
Service Temperature	-40°C to 150°C
Skin Time	30 to 60 minutes at 23°C and 50% relative humidity
Cure Time	3mm per 24 hours at 23°C and 50% relative humidity
Hardness	40 - 45 Shore A
Movement Accommodation Factor	50%
Chemical Resistant To Spillage Of	Dilute acids Petrol Dilute alkalis Diesel oil Mineral oils Paraffin & White Spirit

Specification writers: These values are not intended for use in preparing specifications. Please contact your local **Geocel® Sales Representative** prior to writing specifications on this product.

SURFACE PREPARATION

The sealing slot should be accurately formed. The slot sides should be cleaned by grit blasting, grinding, wire brushing or other means to expose a sound surface. Care should be taken to ensure that the slot is formed to the required depth and any expansion joint filler tightly packed. A tight fitting cord or bond breaker should be inserted at the base of the slot to ensure that the sealant only bonds to the joint sides.

Ensure that all surfaces are clean, dry, sound and free from frost. Clean all joints of release agents, water repellents, laitance, dust, dirt, old sealants or other contaminants, which could impair adhesion.

All surfaces should be cleaned and degreased by wiping with a suitable preparatory solvent available from **Geocel®**.

PRIMING

Geocel®945 exhibits good primerless adhesion to most common construction substrates. However, due to the natural variability of porous materials, such concrete and natural stones, in order to confirm optimum adhesion, we recommend carrying out an adhesion test prior to commencement of any project. Priming is essential for water retaining structure applications. Please refer to **Geocel® Technical Service** for specific advice.

PAINTING

Geocel®945 may be overpainted with water based paints, however due to the large number of coatings available, it is advisable to carry out a compatibility test before application. For alkyd paints water based primer coat must be used.

Paint Type	Suitability
Water based emulsion paint	Suitable
Water based primer sealer	Suitable
Water based undercoat	Suitable
Water based top coat	Suitable
Alkyd resin based paint	Use water based primer sealer undercoat as undercoat
Traditional solvent based undercoat	Use water based primer sealer undercoat as primer
Traditional oil based paint	Use water based primer sealer undercoat as undercoat
Traditional exterior gloss paint	Use water based primer sealer undercoat as undercoat
Cellulose based automotive paint	Suitable
Polyurethane based automotive paint	Suitable

MASKING

Where necessary the joint edges can be masked with tape to prevent contamination of adjacent substrates and ensure a neat sealant line. The tape should be carefully removed immediately after tooling.

APPLICATION

Cut conical tip off cartridge end, screw on nozzle cut at 45° to required size and place into a Cox Powerflow CARTRIDGE **Gun**, firmly extrude into slot or against the substrate. Place aluminium sausage into a Cox Powerflow COMBI **Gun** and remove clasp, cut nozzle at 45° to required size, firmly extrude into slot ensuring complete contact with joint faces.

FINISHING

The sealant should be firmly tooled shortly after application to ensure good contact with joint substrates.

CLEANING

Excess sealant, tools and equipment can be cleaned using **Geocel® Eco Cleanse**. Remove Geocel®945 from hands using **Geocel® Universal Wipes**.

PACKAGING

Geocel®945 is supplied in 290ml cartridges packed in boxes of 12 and 600ml sausages packed in boxes of 10.

ANCILLARY MATERIALS & EQUIPMENT

Cox Powerflow COMBI

Cox Powerflow CARTRIDGE

Geocel® Eco Cleanse

Geocel® Universal Wipes

Geocel® Surface Cleaner

HEALTH AND SAFETY

Health and Safety data sheets available on request.

TECHNICAL SERVICE

IMPORTANT NOTE The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that Geocel's products are safe, effective and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Geocel's sole warranty is that the product will meet the Geocel sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

Geocel specifically disclaims any other express or implied warranty of fitness for a particular purpose or merchantability.

Geocel disclaims liability for any incidental or consequential damages

Geocel®

Geocel Limited

Western Wood Way, Lamage Science Park, Plympton,
Plymouth, Devon, PL7 5BG
Tel: 01752 334350 Fax: 01752 202065 Email: info@geocel.co.uk
www.geocel.co.uk