



**Chem Coats (Pvt) Ltd.**

# FlexoChem G

## Polyurethane elastomeric joint sealant

### DESCRIPTION

FlexoChem G is a two component, elastomeric polyurethane joint sealant.

### USES

FlexoChem G is a sealant used for sealing expansion joints, stress relief joints and movement joints in building and other civil engineering structures, These include superstructures, reservoirs and other water retaining structures, floors, basements and subways.

### FEATURES & BENEFITS

- Forms a tough, elastic, rubber-like seal.
- Accommodates continuous and pronounced cyclic movement in all planes.
- Excellent adhesion to most common construction materials.
- High resistance to ageing and good resistance to extreme climatic changes.
- Specific primers for porous and non-porous surfaces ensure excellent adhesion

### APPLICATION INSTRUCTIONS

#### JOINT PREPARATION

Thorough preparation of joints is essential if a satisfactory seal is to be obtained. For concrete, stone or masonry substrates, all traces of dust, laitance, mould oil, any previous sealant and all other foreign material must be removed by mechanical grinding, followed by blowing out with dry oil-free compressed air. All substrates must be completely dry.

Suitable back-up material, such as ChemCord or ChemSheet must be used to adjust sealant depth in the joint to comply with correct joint geometry. ChemCord is a self releasing material, but if soft-board is used as the joint filler, a plastic strip bondbreaker must be placed on the filler surface before sealant is applied. The use of bond breaking tape is not required in expansion joints where ChemCord or ChemSheet, cellular polyethylene fillers are used except where a tear off strip is employed on the ChemSheet. In this instance, it is recommended that a tape be placed over the cut edge of the ChemSheet to prevent a mechanical bond occurring.

Where the sealant is subject to a hydrostatic head then a 100-200kg/m<sup>3</sup> density ChemSheet must be used.

Any expansion joint filler must be checked to ensure it is tightly packed and no gaps or voids exist at the base of the sealing slot before positioning a bond breaker.



### PROPERTIES OF WET MATERIAL

Mixing Ratio	Do not split kit
Density	1.40g/cm <sup>3</sup>
Colour	Base-White Activator-Black Mixed-Grey
Dilution	Do not dilute
Flash Point	100° C
Toxicity	Uncured material is toxic

### PROPERTIES DURING APPLICATION

Application by	Extrusion gun or spatula
Work life	2-4 hours @25° C
Slump resistance	Shows no slump in joints of 38mm-19mm cross section
Curing time	Tack free: 72 hours Full cure: 7 days
Application temp range	04° C to 35° C
Fire resistance of wet film	Non flammable

### PROPERTIES OF CURED MATERIAL

Service temperature	-50° C to +80° C
Movement tolerance	Total movement must never exceed 25% of neutral width of joint
Staining of porous surface	Does not stain
Hardness	25 Shore A
Chemical resistance	Resists: Dilute acids and alkalis, fats, vegetable oils, petroleum fuels, oils and greases
Water resistance	Excellent
Atmospheric oxidation resistance	Excellent



## PRIMING OF JOINTS

Porous surfaces must be fully primed with ChemPrime 326 brushed well into the sides of the joint face, allowing the solvent to evaporate. The surface should be touch dry between 30 minutes and 2 hours dependant on temperature and humidity.

FlexoChem G must be introduced into the joint during this time window otherwise another coat of primer must be applied

## MIXING

FlexoChem G is normally supplied in a single container. The base is covered by a cellophane sheet. On top of the cellophane is the plastic container of activator paste.

To prepare the material for use, remove the activator and cellophane sheet. Remove any base adhering to the cellophane and replace the base in the container. Remove the entire activator paste from its container and add to the base. Mix the material thoroughly, preferably with a slow speed drill (not in excess of 250 rpm) fitted with a suitable paddle, until an even colour, free from streaks, is obtained. Periodically scrape the sides and base of the container with a spatula or small trowel to ensure complete blending of components. To obtain a complete mix will take five to then minutes of mixing.

## PROTECTION OF ADJACENT SURFACES

Masking tape applied to areas adjacent to joint will protect them from smearing and enable the joints to be finished to a neat line. The tape should be applied after the joint has been prepared, prior to any priming or sealing operating and removed after all finishing and tooling operations have been completed, but before the sealant has cured.

## JOINT GEOMETRY

Minimum width of any joint must be 6mm. The width of joint to be sealed should be four times that of calculated joint movement. For joints up to 12mm in width the sealant depth equals the joint width; for joints greater than 12mm in width, the sealant depth is half the width. The joint faces must be parallel.

## APPLICATION

Application to primed surfaces can be by hand or pressure operated gun or by trowel or by pouring, according to the cross-section of the joint to be filled. It is essential to ensure complete contact between the sealant and the joint surfaces. Tooling of sealant is necessary for complete air-free filling of voids and to assist in making contact by wetting the surfaces to which the sealant is applied. The surfaces of the joint should be smoothed with a clean knife or spatula. A minimum of surface lubricant such as dilute detergent solution may be used to assist the process. Any masking tape should be removed immediately after tooling.

## CLEANING OF TOOLS

Tools and mixing equipment should be cleaned immediately after use, and before the material has set with Chem Coats Brush Cleaner, and to remove FlexoChem G from hands, use abe hand cleaner.

## COVERAGE

FlexoChem G is normally supplied in 2 ltrs kits. Approximate usages are given in the table

Guide of FlexoChem G quantities		
Joint size in mm	J Joint size in mm	Metre per 2-litre
10x10	10x10	10x10
10x10	0.150	13.0
20x10	0.200	10.0
20x15	0.300	6.70
20x20	0.400	5.00
25x13	0.300	6.20
40x20	0.800	2.50
50x25	1.250	1.60

On average use 1 x 500ml kit of ChemPrime 326 with 6 tins of FlexoChem G.

## PROTECTION ON COMPLETION

The finished sealant should be protected from traffic until the sealant has fully cured. Over painting of sealant is not recommended because of the inability of paint films to accept movement. However, if definitely required, trials should be carried out to determine compatibility.

## MODEL SPECIFICATIONS

Where indicated in the drawings joints to be sealed with FlexoChem G supplied by Chem Coats (Pvt) Ltd. and applied strictly in accordance with their latest Data Sheet.

## PACKAGING

FlexoChem G is normally supplied in 2 ltrs kits.

## HEALTH & SAFETY

Wet FlexoChem G is toxic. Always ventilate a working area very well during application and drying.

Always wear gloves when working with the material and avoid excessive inhalation and skin contact. Clean hands well before smoking or eating. If material is splashed in the eye, was well with copious quantities of clean water and seek medical attention.

## HANDLING & STORAGE

FlexoChem G has a shelf life of 12 if months stored in cool dry conditions.



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## IMPORTANT NOTE

The information given in this data sheet is based on current development work and many years of field experience. Whilst every effort is made to ensure that the information is reliable, we cannot accept responsibility for any work carried out with our materials as we have no controls over methods of applications, site conditions etc. In view of the continuing research and development being undertaken in our laboratories we advise customers in their own interest to ensure that this data sheet has not been superseded by a more up-to-date publication. All products are sold subject to our standard conditions of sale which are available on request. Field services, where provided, does not constitute supervisory responsibility. For additional information, please contact your local Chem Coats representative.

## RANGE OF PRODUCTS

WATERPROOFING SYSTEMS  
INDUSTRIAL FLOOR SURFACES  
PROTECTIVE COATINGS

PREPACKED REPAIR MORTARS  
CEMENTITIOUS & EPOXY GROUTS  
CONCRETE ADMIXTURES

SEALANTS  
CRACK INJECTION  
CONCRETE ADHESIVE