



a.b.e.® Construction Chemicals
flexothane P
Pouring Grade

POURING GRADE POLYURETHANE JOINT SEALANT

DESCRIPTION

flexothane P is a two part polyurethane joint sealant that forms a tough durable seal with high adhesion properties.

flexothane P has been formulated for use in the water industry and is particularly suited for applications that require resistance to bacteriological conditions.

USES

flexothane P is designed for sealing of expansion and contraction joints in water storage and retaining structures, sewerage treatment plants and silt accumulated water storage systems.

ADVANTAGES

- Excellent adhesion properties, bonds to most porous and non-porous substrates.
- Resistance to aerobic and anaerobic bacteriological attack.
- High abrasion resistant to silt accumulation systems.
- This product is **NOT** suitable for use in potable water retention structures.

SURFACE PREPARATION

Thorough preparation of joints is essential if a satisfactory seal is to be obtained. Concrete surfaces must be dry, 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.

JOINT GEOMETRY

The minimum joint width for **flexothane P** is 6 mm. The width of joint to be sealed should be four times that of calculated movement. For joints up to 12 mm in width the sealant depth must equal the joint width; for joints 12 mm to 24 mm wide the depth must be 12 mm and finally for joints greater than 24 mm in width, the sealant depth must be half the width. The joint faces must be parallel.

Refer to the "**Preparation of Surfaces**" data sheets for further information.

TYPICAL PHYSICAL PROPERTIES

Form	Pourable paste	
Mixed Colour	Grey	
M.A.F.	25%	
Reaction	Chemical Cure	
Pot life	1 - 3 hours	@ 25°C
Setting time @20°C	20 Hours	
Full Cure	7 Days	
Application temp.	5 to 35°C	
Shore A hardness	25	
Solids	100%	
Density	1,55 kg/L	
Flashpoint	>62°C	

COVERAGE FOR ESTIMATING PURPOSES

Joint Dimensions (mm)	Metres per litre
25 x 12	3,33
20 x 10	5,0
12 x 12	6,94

On average one 250ml tin of **epidermix 326** per 3 tins/6 litres of **flexothane P**

PROTECTION OF SURFACES

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

BONDING/PRIMING

Porous surfaces must be fully primed with **epidermix 326**, brushed well into the sides of the joint faces, to ensure complete coverage. The primer film should be allowed to lose its solvent (approximately 30 minutes) before sealant is applied. Primer open time is 4 hours. If however, the primer is allowed to dry for longer than 6 hours, then the surface must be re-ground and re-primed.

Non-porous surfaces must be primed with **epidermix 391**, brushed well into the faces of the joint to ensure complete coverage. The primer film should be allowed to lose its solvent (approximately 30 minutes drying time) before sealant is applied.

MIXING

flexothane P is 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 r/min) fitted with a suitable paddle, until an even, streak free colour, 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 5 - 10 minutes of mechanical mixing. If hand mixing is to be carried out, a minimum period of 15 minutes of vigorous mixing is required.

NOTE: If material is not mixed thoroughly, its performances will be impaired.

COVERAGE

Coverage and usage is determined by the joint geometry. See table in this data sheet for usage on the most common joint sizes.

BACK UP MATERIAL

Suitable back up material must be used to adjust sealant depth in the joint to comply with the joint geometry cited in this data sheet. **abe® dura.®cord** is a self-releasing material, but if soft-board or cork is used as the joint filler, a plastic bond breaker strip must be placed on the filler surface before the sealant is applied. Under a hydrostatic head, backing cord should be at least 2,5 times greater in diameter than the width of the joint slot.

APPLICATION

Application to primed surfaces can be by hand operated or pneumatic gun 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 to avoid air entrapment and to assist in making contact by wetting the surfaces to which the sealant is applied. The surfaces of the joint should be tooled by pulling a thin metal rod through the sealant. This also aids release of entrapped air.

CLEANING

Tools and mixing equipment should be cleaned immediately after use, and before the material has set, with **abe® super brush cleaner** followed by washing with soap and water.

PROTECTION ON COMPLETION

Protect freshly applied sealant from being damaged by traffic during its setting and curing phase.

APPLICATION TEMPERATURE

Surface and ambient temperature must be at least 5°C and climbing, ideally between 20°C and 30°C.

MODEL SPECIFICATIONS

Two-component, pouring grade, polyurethane sealant for water storage, reservoirs and sewerage works. Not suitable for use in potable water retaining structures.

The sealant will be **flexothane P**, a two component pour grade polyurethane sealant applied in accordance with the recommendations of **a.b.e.® Construction Chemicals**, including primers **epidermix 326** for porous surfaces and **epidermix 391** for non-porous surfaces. The sealant will have a movement accommodation factor of 25% and be biodegradation resistant.

PACKAGING

flexothane P is supplied in 2 litre and 5 litre kits.

HANDLING & STORAGE

flexothane P has a shelf life of 12 months if kept in a cool, dry place in the original packaging. In more extreme conditions this period might be shortened.



HEALTH & SAFETY

Wet **flexothane P** is toxic. Ensure the working area is well ventilated during application and drying to remove fumes. 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, wash well with plenty of clean water and seek medical attention.

Cured **flexothane P** is non-toxic.

IMPORTANT NOTE

This data sheet is issued as a guide to the use of the product(s) concerned. Whilst **a.b.e.® Construction Chemicals** endeavors to ensure that any advice, recommendation, specification or information is accurate

and correct, the company cannot - because **a.b.e.®** has no direct or continuous control over where and how **a.b.e.®** products are applied - accept any liability either directly or indirectly arising from the use of **a.b.e.®** products, whether or not in accordance with any advice, specification, recommendation, or information given by the company.

FURTHER INFORMATION

Where other products are to be used in conjunction with this material, the relevant technical data sheets should be consulted to determine total requirements. **a.b.e.® Construction Chemicals** has a wealth of technical and practical experience built up over years in the company's pursuit of excellence in building and construction technology.



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