a.b.e.® Construction Chemicals

dura.®kol P LM

Pour Grade Low Modulus

POURABLE ELASTOMERIC JOINT SEALANT

DESCRIPTION

dura.®kol P LM is a pourable two component, manganese cured polysulphide sealant, based upon Thiokol polymers.

USES

dura.®kol P LM is used as a flexible sealant for general weatherproofing and waterproofing in and around buildings:

- Horizontal joints in buildings such as expansion joints in floors or around perimeters,
- Floors where the structure is subject to a cyclic movement.
- Where the sealant can be poured rather than be pumped

For sewerage works use **flexothane G**

For water retaining structures use **dura.®kol G HM**.

ADVANTAGES

- Specific primers ensure excellent adhesion to porous and nonporous substrates.
- Rubber-like material withstands movement in all planes.
- Tough elastic seal achieved.
- Interior or exterior use – offers good resistance to extreme climatic conditions.
- Self-leveling.

SURFACE PREPARATION

Thorough preparation of joints is essential if a satisfactory seal is to be obtained. For concrete surfaces, 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 surfaces must be completely dry. Refer to the "**Preparation of Surfaces**" datasheet for further information.

TYPICAL PHYSICAL PROPERTIES OF WET MATERIAL	
Mixing ratio	As supplied - do not split kit
Density	1,7 g/cm³
Colour	Base: Grey Activator: Black Mixed: Grey
Dilution	Do not dilute
Flash point	> 65°C
Toxicity	Uncured material is toxic

TYPICAL PHYSICAL PROPERTIES DURING APPLICATION	
Application by	Extrusion gun or pouring.
Pot life	2 hrs / 25°C
Tack free	72 hours @ 25°C to 35°C
Full cure	7 days
Application temperature	5°C to 35°C
Fire resistance of wet film	Burns but does not support combustion

TYPICAL PHYSICAL PROPERTIES OF CURED MATERIAL	
Service temperature	-5°C to +80°C
M.A.F	25% of width
Shore A Hardness	15 - 20
Chemical resistance	Dilute acids and alkalis, fats and vegetable oils, petroleum fuels, oils, greases
Water resistance	Excellent
Atmospheric oxidation	Excellent

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JOINT GEOMETRY

Minimum joint width must be 6 mm. Joint width to be sealed should be four times that of calculated movement. For joints up to 12 mm wide the sealant depth equals the joint width; for joints greater than 12 mm in width, the sealant depth is half the width. Thus for normal weather sealing type joints the width to depth ratio should be 2:1. For joints under forces such as shear, the width to depth ratio should be retained at 1:1. The maximum joint width is 50 mm. The joint faces must be parallel.

COVERAGE

SEALANT COVERAGE FOR ESTIMATING PURPOSES		
JOINT SIZE IN MM	**LITRES PER L/M**	**L/M PER 2 LITRE PACK**
6 X 6	0.020	55
6 X 10	0.030	33
10 X 10	0.100	20
15 X 10	0.150	13
20 X 10	0.200	10
20 X 15	0.300	6.6
20 X 20	0.400	5
40 X 20	0.800	2.5
50 X 25	1.250	1.6
No allowance has been made in the above estimates for wastage		
PRIMER COVERAGE FOR ESTIMATING PURPOSES		
± 250ml tin of **epidermix 326**	per 3 tins/6 litres of sealant	
± 500ml tin of **epidermix 326**	per 6 tins/12 litres of sealant	
No allowance has been made for primer wastage or the varying porosity of the concrete to which it is applied.		

PRIMING

Porous surfaces must be fully primed with **epidermix 326** (epoxy primer). Ensure primer is brushed well into the faces of the joint, to ensure complete coverage. Avoid over-priming which results in an excess of primer in the base of the joint. The primer film should be allowed to lose its solvent (approximately 30 minutes drying) before sealant is applied. **Primer open time is 4 hours.** If however, the primer is allowed to dry 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) before sealant is applied.

BACK-UP MATERIAL

Suitable back-up material, **dura.®cord** must be used to adjust sealant depth in the joint to comply with the joint geometry cited overleaf. **dura.®cord** is a self-releasing material, but if soft-board or cork is used as the joint filler, a plastic strip bond breaker must be placed on the filler surface before sealant is applied.

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 masking tape should be applied after the joint has been prepared, prior to any priming or sealing operation and removed after all finishing and tooling operations have been completed, but before the sealant has cured.

MIXING

dura.®kol P LM is supplied in two separate containers. 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 to 10 minutes of mechanical mixing. If hand mixing is to be carried out, a minimum of 15 minutes of vigorous mixing is required. Avoid air entrapment. **Note**: If material is not mixed thoroughly, its performances will be impaired.

APPLICATION

Do not apply **dura.®kol P LM** at temperatures below 5°C. Application to primed surfaces can be done by pouring the material directly from the container or for joints less than 15 mm wide by hand or pneumatic gun. It is essential to ensure complete contact between the sealant and the joint surfaces. Tool with a rod of similar diameter to the joint width. This will release air and provide the correct profile to the joint sealant surface. The top of the joint may be smoothed over with a clean knife or spatula, which can be moistened with a little clean water or sprayed with a mild solution of liquid soap and water.

CLEANING

All 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

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.

MODEL SPECIFICATION

A pourable two-component, manganese cured polysulphide sealant, based upon Thiokol polymers.

The sealant will be **dura.®kol P LM**, a two-component, low modulus polysulphide sealant applied in accordance with recommendations of **a.b.e.® Construction Chemicals**, including the use of **epidermix 391** primer for non porous surfaces and **epidermix 326** primer for porous surfaces.

PACKAGING

dura.®kol P LM is supplied in 2 litre and 5 litre metal container kits.

LIMITATIONS

dura.®kol P LM should not be used in direct contact with materials containing pitch or bitumen.

- Do not use in bridge joints.
- Do not use in water-retaining structures.

HANDLING & STORAGE

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

HEALTH & SAFETY

dura.®kol P LM is toxic. Ensure working area is always well ventilated during application and drying. Avoid flames in vicinity. Always wear gloves when working with the material and avoid excessive inhalation and skin contact. If material is splashed in the eye, wash with copious quantities of clean water and seek medical attention.

Cured **dura.®kol P LM** is inert and harmless.

IMPORTANT NOTE

This data sheet is issued as a guide to the use of the product(s) concerned. Whilst **a.b.e.® Construction Chemicals** endeavours 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.