a.b.e.® Construction Chemicals

flexothane HS
Highway Sealant

ELASTOMERIC FUEL RESISTANT SEALANT

DESCRIPTION

flexothane HS is a two part, cold applied elastomeric fuel resistant joint sealant based on a polyurethane and tar blend.

USES

flexothane HS is suitable for flexible joint sealing in applications such as:

- concrete pavements.
- asphalt pavements.
- garage forecourts.
- fuel depots.
- transport and cargo depots.

ADVANTAGES

- Very good flexibility.
- Chemically resistant to fuel, oils and hydraulic fluids making it suitable for numerous applications.
- Self leveling and very easy to apply without the need to tool.

TYPICAL PHYSICAL PROPERTIES	
Base	Viscous liquid
Curing agent	Liquid
Color	Black
M.A.F.	25%
Reaction type	Chemical cure
Trafficable	24 hours
Full cure	7 days
Shore A hardness	15 to 20
Chemical resistance to occasional spillage	Resistance to dilute acids, mild alkalis, petrol, aviation fuels, diesel fuels, synthetic oils, mineral oils, hydraulic fluids, kerosene and white spirit
Solids content	100%
Relative Density	1,36 kg/litre
Flash point	> 62°C

PROPERTIES	
Flash point	30°C
Relative Density	0,92
Coverage	12,5 m²/litre

COVERAGE FOR ESTIMATING PURPOSES	
Joint size in mm	Litre per meter
10 x 10	0,100
13 x 13	0,169
15 x 15	0,225
20 x 15	0,300
20 x 20	0,400
25 x 20	0,500
25 x 25	0,625
30 x 25	0,750

One litre of **flexoprime A** or **C** is normally sufficient for 20 litres of **flexothane HS**. Figures quoted are theoretical and no allowance has been made for wastage or the varying porosity of the concrete to which it is to be applied.

JOINT GEOMETRY

The minimum joint width for **flexothane HS** 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.

SURFACE PREPARATION

Thorough preparation of joints is essential to obtain a satisfactory seal. Concrete surfaces must be clean sound and 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.

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Refer the **"Preparation of Surfaces"** datasheet for further information.

BONDING/PRIMING

Porous surfaces must be primed with **flexoprime C** brushed well into the joint face, allowing the solvent to evaporate. The surface should be touch dry in 30 minutes to 2 hours subject to temperature and relative humidity.

flexothane HS must be introduced into the joint during this time period. If this period is exceeded another coat of primer must be applied.

Where **flexothane HS** is in contact with asphalt, **flexoprime A** must be used to prime this surface, brushed well into the joint face, allowing the solvents to evaporate. The surface should be touch dry in 30 minutes to 2 hours, subject to temperature and relative humidity.

MIXING

Place the entire contents of the activator into the base and thoroughly mix for approximately 4 minutes using a suitable mixing paddle attached to a slow-speed drill (300-400 r/min). It is essential to ensure that the base and activator are thoroughly mixed, periodically scrape the sides and bottom of the tin while mixing and ensure that the mix obtained is homogeneous, smooth and consistent. Re-mix where necessary.

NOTE: It material is not mixed thoroughly, it's performance will be impaired.

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 the table. **abe® dura.®cord** is a self-releasing material, but if soft-board is used as the joint filler, a plastic strip bond breaker must be placed on the filler surface before sealant is applied.

APPLICATION

flexothane HS may be poured directly from the container when joints exceed 25 mm. However it is always recommended that **flexothane HS** is applied using a suitable sealant gun ensuring that the sealant is set 4 mm below the operational surface of the concrete or asphalt pavement. **flexothane HS** is a self-leveling sealant and no tooling is required.

CLEANING

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

PROTECTION ON COMPLETION

The finished sealant should be protected from heavy traffic until the sealant has fully cured. Over-painting of sealant is not recommended.

APPLICATION TEMPERATURE

Surface and ambient temperature must be at least +5°C and rising ideally between 20°C and 30°C. Lower temperatures will extend the curing period.

COVERAGE

Refer to the **"Coverage for Estimating Purposes"** for anticipated coverage.

MODEL SPECIFICATION

Heavy-duty pavement sealant for cold-sealing of joints in concrete paved areas. Fuel resistant.

The sealant will be **flexothane HS**, a two-component, cold-applied elastomeric sealant applied in accordance with the recommendations of **a.b.e.® Construction Chemicals**, including primers **flexoprime A** for asphalt and **flexoprime C** for concrete. The sealant will have a movement accommodation factor of 25% and be resistant to fuel, oil and hydraulic fluid.

PACKAGING

flexothane HS is supplied in 5 litre kits.

flexoprime A and C are supplied in one litre tins.

HEALTH & SAFETY

Uncured **flexothane HS** contains coal tar and is toxic and flammable. Ensure the working area is well ventilated during application and drying. Avoid naked flames in the vicinity. Gloves should always be worn to avoid skin contact. Also avoid excessive inhalation of fumes. If the product is splashed in the eye, wash with plenty of clean water and seek immediate medical attention. It is imperative that after handling the product, hands must be thoroughly cleaned before eating or smoking. **flexoprime C** is a highly flammable liquid and must not be used near a naked flame. It is also advisable to wear gloves during application of the primer and thorough washing of the hands after use is strongly advised.

HANDLING & STORAGE

flexothane HS has a shelf life of 12 months if kept in a cool, dry place in the original packaging. Ideal storage temperature of 25°C, Storage in temperatures above 25°C may reduce shelf life.

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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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