



SAINT-GOBAIN

**flexothane® CTW**

**COAL TAR WAR**

**CHEMICALLY RESISTANT  
JOINT SEALANT**

## DESCRIPTION

**flexothane® CTW** is a semi-flexible, hard wearing expansion joint sealant based on modified epoxy, polyurethane, tar and inert fillers. Due to its unique composition it is flexible yet hard and is resistant to a wide range of acids and alkalis. **flexothane® CTW** will bond to a damp substrate.

## USES

**flexothane® CTW** is used for sealing low-movement construction joints in acid resistant construction such as acid brickwork and chemical resistant screeds. Because it will bond to a damp substrate, **flexothane® CTW** is ideal for use in not only new construction projects but also in repair and maintenance work. Also suitable for trafficked floor joints where constant wheel contact demands a high shore A hardness sealant.

## ADVANTAGES

- High shore A hardness offers protection against arris damage
- Good chemical resistance, joint sealing in chemical plants, acid lining brick work and chemically resistant screeds
- Suitable for new concrete construction
- Good primerless adhesion
- Will bond to damp surfaces
- Good flexing properties with excellent adhesion to properly prepared substrates

## JOINT GEOMETRY

In joints of 6 mm to 12 mm wide, the depth of the sealant should equal the width. In joints in excess of 12 mm wide, the sealant depth should be half of the width. The recommended joint width for **flexothane® CTW** is 6-9 mm.

## SURFACE PREPARATION

Thorough preparation of joints is essential if a satisfactory seal is to be obtained. For concrete surfaces 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.

### TYPICAL PHYSICAL PROPERTIES

|                     |   |
|---------------------|---|
| Material            | Epoxy polyurethane tar  |
| Colour              | Black   |
| Coverage            | Refer table   |
| Setting time        | 4-6 hours dependent upon temperature  |
| Trafficable cure    | 24 hours  |
| Full cure           | 7 days  |
| Maximum temperature | Laying 35 °C<br>Service 70 °C   |
| Toxicity            | Inert when cured, but do not use in direct contact with foodstuff or drinking water |
| Water tainting      | Will taint potable water  |

### MECHANICAL PROPERTIES

|                     |   |
|---------------------|---|
| Tensile strength    | 1,6 MPa   |
| Shore A Hardness    | 75  |
| M.A.F.              | 5%  |
| Chemical resistance | Resistant to a wide range of acids and alkalis but limited resistance to solvents |
| Porosity            | Non-porous  |

### CONSUMPTION FOR ESTIMATING PURPOSES

(no allowance made for waste)

| Joint width x depth (mm) | Metres per litre |
|--------------------------|------------------|
| 6 x 6                    | 27,8             |
| 9 x 9                    | 12,3             |
| 12 x 12                  | 6,9              |
| 15 x 8                   | 8,3              |

## PROTECTION OF SURFACES

Masking tape applied to areas adjacent to the 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 operating and removed after all finishing and tooling operations have been completed, but before the sealant has cured.

## BONDING/PRIMING

Under normal circumstances, no priming of joints is required. However in joints exceeding 12 mm wide, to improve adhesion, **epidermix® 116** can be used as a primer.

## 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. Backing cord 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 the sealant is applied. Under a pressure head of liquid, backing cord should be at least 2,5 times greater in diameter than the width of the joint slot.

## MIXING

Add entire contents of the activator to the base material and mix thoroughly using a suitable paddle attached to a slow-speed

drill. Mix for 4-5 minutes, stopping occasionally to scrape the sides and base of the tin to ensure complete blending of the activator throughout the base.

**NOTE:** If the material is not mixed properly it's performance will be impaired.

## APPLICATION

Application 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 sealants is necessary to avoid air entrapment and to assist in wetting out the surfaces to which the sealant is applied. The sealant should be tooled by pulling a thin metal rod through the sealant to release all air bubbles.

## CLEANING

All tools must be cleaned before the sealant cures with **abe® super brush cleaner**. Cured material can only be removed by mechanical means.

## APPLICATION TEMPERATURE

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

## MODEL SPECIFICATIONS

Pitch polyurethane trafficable joint sealant with good chemical resistance. The sealant will be **flexothane® CTW**, a gun grade two component, epoxy/polyurethane/tar compound applied in accordance with the recommendations of **a.b.e.®** including **epidermix® 116** primer where necessary. The sealant will have a Shore A hardness of 75.

## PACKAGING

**flexothane® CTW** is supplied in 2 l kits.

## HEALTH & SAFETY

**flexothane® CTW** is toxic. Ensure the working area is 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 plenty of clean water and seek medical attention.

Cured **flexothane® CTW** 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.®** endeavours to ensure that any advice, recommendation, specification or information is accurate and correct, the company cannot accept any liability for application – because **a.b.e.®** has no direct or continuous control over where and how **a.b.e.®** products are applied.

## 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.®** has a wealth of technical and practical experience built up over the years in the company's pursuit of excellence in building and construction technology.

Please consult our website for our latest datasheets.

DATE UPDATED: 22/11/2023

a.b.e.\* is an ISO 9001:2015 registered company  
Call: (+27) 860 223 773 | (+27) 11 306 9000  
[www.abe.co.za](http://www.abe.co.za)