

BENTOSWELL**Description**

Hydrophilic, swellable waterstop made of high quality sodium bentonite and butyl rubber for the preventive sealing of construction joints and as a system component for bentonite mats. BENTOSWELL retains its shape after 3 wet and dry cycles and is suitable for use in water exchange zones. However, at some point there will be some wash-out. The advantage of this phenomenon is that concrete voids/cracks are filled. BENTOSWELL has a good resistance to a wide range of chemicals. The product was tested at MFPA Leipzig.

Application

BENTOSWELL can be applied both vertically and horizontally, but under no circumstances should it be used in expansion joints. Place the BENTOSWELL on a smooth and dust-free surface (concrete). To ensure a continuous section of the sealing tape, an overlap of at least 5 cm is applied and the ends of the tapes are firmly pressed together. In case of a change of direction (corners), BENTOSWELL is placed firmly together without overlapping. A minimum concrete cover of 8 cm on each side is required. Do not install BENTOSWELL during heavy rainfall as this may cause swelling before the concrete has been poured onto the sealing tape. Avoid any contact with water before pouring concrete. BENTOSWELL is installed between the inside and outside reinforcement. BENTOSWELL can be fixed by using bentonite waterstop fixing glue or by gun nailing with wire mesh. For vertical applications, the use of a wire mesh is recommended. The mesh and tape are then fixed by gun nailing. BENTOSWELL tapes that are damaged, already swollen, or whose geometry has changed may not be installed. For saltwater environments, polluted water conditions and contact with manure and slurry, we recommend BENTOSWELL SALT. The usability of the product in the respective installation situation must be checked by the user!

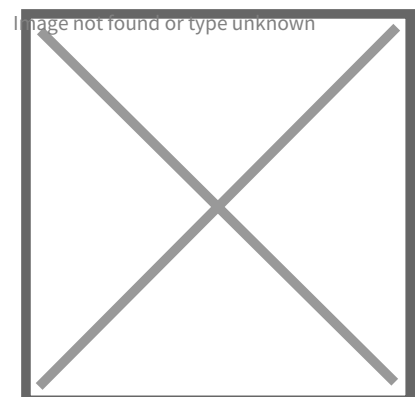
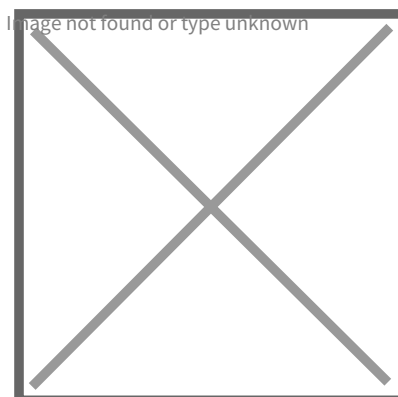
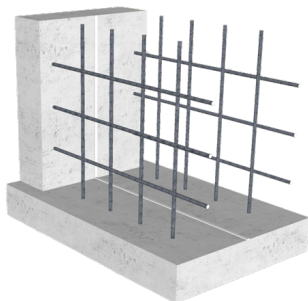
1. Ensure full contact with the joint. If required use fixing glue.
2. Unroll the BENTOSWELL between the first phase starter bars with a minimum concrete cover of 8 cm.
3. Install wire mesh over the BENTOSWELL. In order to ensure good contact with the construction joint surface, shotfire the wire mesh every 25 cm, using nails with washers.

Material

- Sodium bentonite
- Butyl rubber
- Free from PVC, CFC and HFC
- Without substances of very high concern according to ECHA candidate list (REACH Regulation)

Packaging

- Free of halogen-containing compounds, azo dyes, flame retardants



DATA SHEET

BENTOSWELL



Item no.	Dimension mm	Length m	Rolls/ Box	m/ Box	m/ Pallet
BS192405/04	19 x 24	5,00	6	30,00	1.620,00
BS192405/08	19 x 24	5,00	6	30,00	1.620,00
BS201010/04	20 x 10	10,00	5	50,00	3.150,00
BS201010/08	20 x 10	10,00	5	50,00	3.150,00
BS202505/04	20 x 25	5,00	6	30,00	1.620,00
BS202505/08	20 x 25	5,00	6	30,00	1.620,00

.../04 = Colour Black

.../08 = Colour Green

Technical data:

Mass increase in deionized water (rainwater)	240 %
Mass increase in alkaline water (concrete water)	30 %
Mass increase in concrete attacking water	120 %
Colour	Black (Item no. BS...04) / Green (Item no. BS...08)
Density	1.45 g/m ³
Swelling pressure when encapsulated	Approx. 32 kN/m (Dimension approx. 20x25 mm)
Resistance to hydrostatic pressure	Tested up to 5 bar (Dimension approx. 20x25 mm)
Application Temperature	0 / +50 °C
Service Temperature	-50 / +70 °C
Tolerance range (dimensions)	+/-1.0 mm

These data are not suitable for the issue of specifications. Please contact our Sales Office before issuing specifications.

Weather resistance: Excellent UV and ozone resistance. Avoid long term exposure to direct sunlight.

Chemical resistance: Good general chemical resistance to acids, alkalis and most aqueous solutions but caution is advised with aromatic oils and fuels, vegetable oils and strong aromatic solvents. Contact our Sales Office for detailed specific information.

Chemicals (concentration 1–10%) - Resistance

Inorganic acids	No effect
Inorganic bases	No effect



For product video
scan or click here!



For further documents
scan or click here!



Organic acids/bases	No effect
Alcohols	No effect
Aldehydes	No effect
Amines	No effect
Ester	No effect
Ether	No effect
Detergents and other cleaning agents	Moderate effect
Chlorine water	No effect
Benzene	Moderate effect
Nitrobenzene	Moderate effect
Toluene	Moderate effect
Xylene	Moderate effect
100/150 solvents	Moderate effect
Aliphates hydrocarbons (oils and fuels)	Moderate effect
Halogenated hydrocarbons	Moderate effect
Carbon disulphides	Moderate effect
Biological fats, oils and sugars	Moderate effect

No effect: Performance will not be affected under most service conditions.

Moderate effect: Performance may be affected, especially with long-term exposure.

For information on chemical resistance to chemicals in concentrations above 10%, please contact our Sales Office.

Note: Protect from direct sunlight and moisture during storage.

