



BAUTHENE PU1

One Part Polyurethane Joint Sealant

DESCRIPTION

BAUTHENE PU1 is a one part low modulus high performance polyurethane sealant, which cures on absorption of atmospheric moisture to form a firm and flexible rubber watertight seal for moderate movement and control joints.

BAUTHENE PU1 can be used in both horizontal and vertical applications. The sealant has a movement Accommodation Factor (mAF) of $\pm 25\%$.

TYPICAL USES

- Concrete expansion joints
- Precast concrete cladding
- Brick cladding 4 Perimeter caulking (windows, doors, aluminium frames)
- expansion and constructions joints in water retaining structures
- Curtain wall joints
- Parapet walls

ADVANTAGES

- Highly resilient with excellent recovery characteristics
- Provides permanent and uniform watertight seal

- Excellent adhesion to most building substrates. Can be used without the use of primer in new substrates
- Non-toxic. Can be used in potable water reservoirs and swimming pools
- Easy to apply, one component sealant. No mixing required
- Over painting can be done (rigid paints may crack)

BAUTHENE PU1 complies with the requirements of:

BS 5212: Part 1

ASTM C 920, Type S, Grade NS, Class 25

Federal Spec TT-S-00230C, Type ii, Class A

TECHNICAL PROPERTIES

(The properties shown below were obtained under laboratory conditions).

Color	Grey/white/Beige
Density	1.3 \pm 0.03 g/cc
Viscosity	Thixotropic paste
Shrinkage	< 5%
Shore A Hardness	20=35
Adhesion to concrete,	>25 N
Elongation	>250
Skinning time @standard condition [hrs]	24 hours
Chemical resistance	pH 2.5 to 11.5, seawater

Cure rate	1 mm per day
Application temperature, [°C]	5 to 50 degrees C
Service temperature, [°C] -20 to 70	-20 TO 70 deg.C

APPLICATION INSTRUCTION

SURFACE PREPARATION

The joint edges must be clean, dry and free from oil, loose particles, cement laitance and other contaminants which may affect the adhesion. A thorough wire brushing, grinding, sand blasting or solvent cleaning may be required to expose a clean and sound substrate. When applied on glazed surfaces like ceramic or terrazzo tiles or porcelain enamel joint surfaces, the glaze should be removed by abrading with sandpaper or wire brush.

PRIMING

On new substrates, the sealant can be applied without Primer. However, for old and very porous substrates apply BAUPRIME PS*. When applying on aluminium and metal surfaces, ensure the surface is cleaned of all lacquer or protective coatings. Galvanized, copper and stainless steel surfaces shall be primed with BAUPRIME NP.

BACK-UP MATERIAL

A bond breaking backing rod shall be inserted into all movement joints to avoid a three sided adhesion. Use of a backing rod will ensure proper joint depth and at the same time facilitate the formation of an hour glass profile on the applied sealant. The backer rod will also provide resistance to sealant tooling pressure and help to attain proper wetting of the substrate when the sealant is being tooled. The backing rod being inserted into the joint shall be

of a diameter which is at least 20% larger but not greater 33% of the joint width. This will ensure that the backer rod remains in compression and in place during sealant installation. For static and joints where the depth is not sufficient for the use of the backing rod, a bond breaking tape may be applied to prevent the three side adhesion.

CAUTION: Do not damage or poke holes in the backer rod during or after installation, since this may cause air bubbles in the sealant and affect its performance.

APPLICATION

BAUTHENE PU 1 is available in a ready to use self contained sausage which can be loaded onto a barrel gun. Start extruding the sealant into the joint firmly by maintaining an even pressure on the trigger of the gun. On vertical joints, sealant extrusion shall start from the bottom of the joint and continued to the top. Once the sealant has been installed a suitable rounded tool can be used to achieve a smooth hour glass profile.

DO NOT USE SOAPY WATER SOLUTION. Any masking tape applied should be removed immediately after the sealant is installed.

LIMITATIONS

BAUTHENE PU1 is not recommended for:

- Movement joints having mAF >25%.
- Damp and contaminated surfaces
- Asphalt pavements
- When over painting check paint compatibility with sealant
- External application with white / off white colour will result in yellowing on exposure to UV.
- Joints width > 25mm

JOINT DESIGNS

The width of the joint should be a minimum of 4 times the anticipated movement. Joints with cyclic movement should have a width to depth ratio of 2:1 for butt joints and 1:1 for floor, static and lap joints.

The joint depth shall not exceed the width. The joint width and depth should be maintained as recommended:

- Joint Width 6 mm (minimum) 25 mm (maximum)
- Joint Depth 6 mm (minimum for porous surfaces) 15 mm (minimum for non porous surfaces)

COVERAGE

Length of joints in meters filled per 600 MI Sausage of BAUTHENE PU1.

Depth (mm)	Width (mm)				
	6	10	15	20	25
6	16.6	10	6.7		
10		6	4.7	3.0	
15			2.0	2.0	1.6
20				1.5	1.2
25					1.0

PACKAGING: 600 MI Sausages/ 12 sausages per carton.

STORAGE

Store under cover, out of direct sunlight, clear of the ground on pallets and protect from extreme temperatures. In tropical climate the product must be stored in air conditioned environment (<25°C).

Shelf life is 12 months when stored as above.

PRECAUTIONS

As with all construction chemicals products caution should always be exercised. Protective clothing such as gloves and goggles shall be worn. Treat any splashes to the skin or eyes with fresh water immediately.

There are no known health hazards associated with BAUTHENE PU1

Clean all the tools with water after use. Hardened materials can be removed mechanically only. Allow the waste to cure. Seal it into a suitable container and bury in land fill as per the local regulations.

Note: Whilst any information contained herein is true, accurate and represents our best knowledge and experience, no warranty is given or implied with any recommendations made by us, as the conditions of any labor involved in the application is beyond our control. BAUTECH shall not be liable for any injury, loss or damage, direct or consequential, arising out of the use of this product. It is the responsibility of the user to ensure that the product meets his particular requirements and to use it in a suitable way. Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local BAUTECH representative.



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