

TOSSEAL 811*

TOSSEAL 811* is a one-component, neutral cure type silicone sealant that cures on exposure to atmospheric moisture at room temperature to a long-lasting silicone rubber sealant. TOSSEAL 811* provides excellent adhesion to not only concrete but most construction materials and exhibits both superior high and low temperature resistance and water resistance, in addition to outstanding weatherability. The extremely low modulus characteristic of TOSSEAL 811* minimizes strain on the surface of the substrate, allowing for excellent recovery from compression and extension.

TOSSEAL 811* is highly suitable for application in concrete joints that are subjected to relatively high joint movement, such as the expansion joint, longitudinal and transverse joints in concrete road, pavement, warehouse and parking slab, etc.

KEY PERFORMANCE PROPERTIES

- ◆ One component, ready-to-use sealant
- ◆ Extremely low modulus
- ◆ Non-sag paste ideal for use on horizontal, vertical or overhead surfaces
- ◆ Room temperature cure
- ◆ Easy gunnability over a wide temperature range
- ◆ Excellent high and low temperature resistance
- ◆ Excellent adhesion to concrete and most construction

APPLICATIONS

- ◆ Road joints, expansion joints, warehouse floor slab, parking apron, etc.
- ◆ Curtain wall joints subjected to movement - metal, precast concrete, flexible board
- ◆ Panel sealing
- ◆ Joints requiring an extremely low modulus product

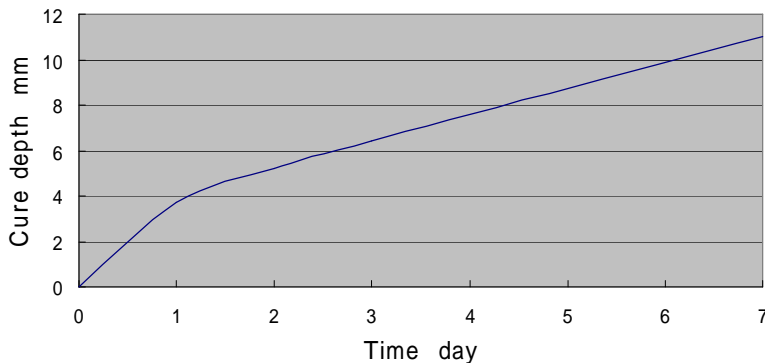
TYPICAL PROPERTY DATA

(JIS A 1439)

UNCURED PROPERTIES		
Appearance		Light Gray paste
Specific gravity (23°C)		1.23
Tack-free time (23°C)	min	50
Slump	mm	0
SHEET PROPERTIES (Cure condition: 23 /50%RH, 7days)		
Hardness (Type A)		10
Hardness (Type E)		35
Tensile strength	MPa {kgf/cm ² }	1.8 {12}
Elongation	%	1500
CURED PROPERTIES (Cure condition: 23 /50%RH, 14days + 30 , 14days)		
Substrate		Mortar * ¹
50%modulus	MPa{kgf/cm ² }	0.12{1.2}
Maximum tensile strength	MPa{kgf/cm ² }	0.82{8.4}
Elongation	%	900

*1: Primer: Tosprime C

CURING PROPERTIES (Condition:23 ,50%RH)



Typical property data values should not be used as specifications.

JOINT DESIGN CRITERIA

- ◆ TOSSEAL 811* will withstand the joint movement of +100% to -50% when properly applied. However the joint movement should be designed to $\pm 25\%$ movement to ensure the performance at job site.
- ◆ The thickness of the sealant bead should be no more than 12mm and no less than 8mm.
- ◆ The sealant should be tooled about 5 to 8 mm below the pavement surface to prevent traffic contact in the case of traffic road application.

APPLICATION INSTRUCTIONS

◆ SURFACE PREPARATION

Cleaning and drying is an important procedure. Sealant will not adhere properly to a wet substrate. All surfaces must be clean, dry and free from dust, oil. In the case of traffic road application, saw cut joints must be thoroughly cleaned by high pressure water wash, followed by dry with high pressure air. And leave at least 1day to dry. Do not use soap or detergent to clean.

When resealing old joint, a previous seal should be removed mechanically and do not melt old asphaltic seal with a hot saw blade or a solvent wipe.

◆ MASKING

To obtain a neat sealant line, use masking tape to cover areas adjacent to any joints before priming.

◆ BACK-UP MATERIAL

Do not apply sealant in direct contact with organic rubber such as chloroprene. Rubber back-up materials may stain the sealant. A closed cell polyethylene backer rod must be installed into the joint. The backer rod size must be 20-25% larger than the joint width to fix at appropriate position depth.

◆ PRIMING

TOSSEAL 811* adheres to the common concrete substrate without primer provided the surface is clean and free from any trace of laitance and surface dust. In view of unpredictable surface characteristics, trial applications should be made to check adhesion to the specific materials to be used on the project. To achieve the best adhesion, primer TOSPRIME C is recommended on concrete and masonry. Allow the primer to dry thoroughly before proceeding.

LIMITATION

- ◆ Avoid contact of the sealant with bituminous materials. It causes staining or loss adhesion.
- ◆ Not applicable for continuous water immersion.

HANDLING AND SAFETY

- ◆ Once opened, all contents must be used within one day.
- ◆ Wear eye protection when handling uncured sealant as it can irritate eyes. In case of eye contact, immediately flush eyes well with water and contact a physician.
- ◆ This product releases methyl ethyl ketoxime vapor as a by-product of cure. Adequate ventilation must be maintained in the work place at all times.
- ◆ Extended contact with the skin may cause irritation and should be avoided.
- ◆ Not for food contact use.

STORAGE

- ◆ Store in a cool and dry place out of direct sunlight.
- ◆ Keep out of the reach of children.

PACKAGING

20kg pail available.

COLORS

Available in colors: Light Gray (G)

PRIMER

Primer TOSPRIME D has been specially prepared to ensure the durability and bonding strength of TOSSEAL 811 to various substrates like mortar, masonry, tile, glass, metal, ceramics and painted metal.

Packing : 300ml can available in cases of 20

Caution : When working with primers, it is important to remember that they contain solvents, which are highly flammable and toxic. All cautions must be strictly observed. Storage and use must be done in a well-ventilated area away from any source of ignition such as heat, sparks, and flame.

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