Talrakseal® SA

High performance swellable acrylic polymer based hydrophilic water stop for construction joints in concrete

The Construction Alchemists

Description

Talrakseal® SA is a new generation high performance rubberish waterstop with inorganic fillers and expanding agents. It expands up to 900% when soaked with water. In a totally dry state, Talrakseal® SA will shrink to it's original dimension and re-expands on wetting.

Features & Benefits

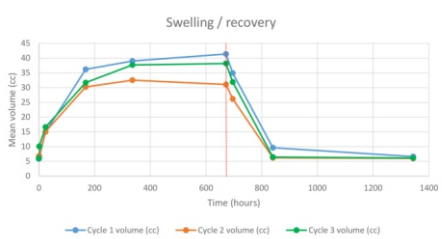
- Can be used on a variety of irregular substrates, along the joint
- Forms water tight seal in the construction joints
- User friendly
- Simple to overlap at in-situ joints
- No hardening time required
- No welding required
- Compatible with normal and salt water

Primary Application

Talrakseal® SA is used in concrete construction for the sealing of construction joints including wall to base connections, pipe entry systems, sealing of openings and interfacial sections between existing and new concrete.

Technical properties

The volumetric change was measured upon wetting and drying by immersing in tap water at 23°C over a 28-day period. The drying shrinkage in the volume was measured upon drying. Three wetting and drying cycles were repeated and no shrinkage cracks were observed. The measurements were taken and the values are as follows:



Application Temperature	-10°C to +50°C
Density	1.35 ± 0.05 g/cc
Shore A Hardness	50
The expansion rating is affected according to $CaCO_3$ and salt content. Contains no traces of Bentonite.	
Day 7	≥300%
Sealing resistance of the joint under pressure @ 14 days	7 bar
Colour	Red/Pink
Elongation Break	Median value: 553% (TS ISO 37, Rubber Plate, Type 1, 5 specimens, Pulling speed: 500mm/minute, Conditioning 23°C-50%)
Tensile Strength	Median value: 2.1 MPa (TS ISO 37, Rubber Plate, Type 1, 5 specimens, Pulling speed: 500mm/minute, Conditioning 23°C-50%)

Note: The dotted red line indicates the end of the swelling and the start of the recovery cycle

Swelling	Cycle 1		Cycle 2		Cycle 3		Average Change (%)
	Mean mass(cc)	Change (%)	Mean mass(cc)	Change (%)	Mean mass(cc)	Change (%)	
Initial	5.84	-	6.64	13.70	6.02	3.08	8.39
1 hour	6.18	5.82	6.88	17.81	10.07	72.43	32.02
1 day	14.99	156.68	15.07	158.05	16.63	184.76	166.50
7 day	36.19	519.69	30.23	417.64	31.69	442.64	459.99
14 day	39.06	568.84	32.54	457.19	37.71	545.72	523.92
28 day	41.41	609.08	31.07	432.02	38.19	553.94	531.68
Recovery	**Cycle 1**		**Cycle 2**		**Cycle 3**		**Average change (%)**
	Mean mass(cc)	Change (%)	Mean mass(cc)	Change (%)	Mean mass(cc)	Change (%)	
1 day	34.97	498.80	26.22	348.97	31.93	446.75	431.51
7 day	9.63	64.90	6.195	6.08	6.47	10.79	277.25
28 day	6.64	13.70	6.02	3.08	6.14	5.14	7.31

Note: Observations to the samples throughout testing conforms that there was no degradation of the material throughout the duration of the test.

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Application Instructions

Surface Preparation

The substrate must be sound, clean and dry/matt damp. Do not apply in construction joints with existing standing water.

Application

Talrakseal® SA may be placed at the bottom of a keyway. To facilitate proper installation, it is placed and secured along the center of the construction joint.
In reinforced concrete maintain a minimum cover of 80 mm on both sides and in unreinforced concrete maintain a minimum cover of 150 mm on both sides. Talrakseal® SA should be protected against water (example: rain) until the concrete is placed. During placement, compact the fresh concrete well around the Talrakseal® SA to achieve dense concrete without any honeycombs or voids.

NOTE: It is designed for use in non-moving or reinforced joints. Contact Talrak regarding applications where limited movement could be expected.

Estimating
Packaging

Talrakseal® SA is supplied in,

5 mm x 20 mm: 20 meters roll
10 mm x 20 mm: 10 meters roll
20 mm x 25 mm: 5 meters roll

Storage

The quality and characteristics of Talrakseal® SA remains unaltered for a long time, nevertheless it is better to use the product within 36 months.
Talrakseal® SA must be stored in its original moisture proof wrap in cool, dry conditions away from sunlight.

Precautions
Health & Safety Instructions

There are no health hazards associated with Talrakseal® SA acrylic rubber sealant in normal use. However, with any material, good hygiene practices should be followed, i.e., keep out of eyes, do not consume, keep away from children and pets and wash hands thoroughly after use.

Talrak Construction Chemicals Pvt. Ltd.
An ISO 9001:2015 Certified Company

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