

BUTYLSEAL

SPECIALISED SEALANTS FOR THE ROOFING, AUTOMOTIVE, CABLING AND CONSTRUCTION INDUSTRIES

Butyl Tape is chemically inert, therefore it will resist oxidation, and will remain permanently elastic, resistant to cracking, and will not degrade under Ultra-violet light. (Butyl tape was tested for over 9000 hours in a U.V cabinet without degradation).

▶ It will not :

- Harden.
- Crack or nor lose adhesion when subjected to bending, elongation, expansion or contraction. (Even at low temperatures).
- Soften and flow out of the joint.
- Lose adhesion.
- Break-down nor flow out of a joint, due to sound or wind vibration.

▶ It will :

- Adhere to metal, glass, porcelain, concrete, plastic, polycarbonate, wood, and marble.
- Retain Tack and adhesion.
- Remain elastic from -20° C to 120° C.
- Allow movement due to expansion and contraction.
- Resist moisture vapour transmissions. (Prevents moisture from passing through the seal.) No fogging of glass or rusting of metal.
- Absorb vibrations and sound.
- Reduce sound by absorption.

▶ It is :

- Self Healing.
- Chemical, weather and age resistant.
- Resistant to acids, alkali's and salts.
- Resistant to mildew

▶ It has:

- An effective life of 20 years.
- A high heat resistance of up to 160° C.
- A low temperature resistance of - 40° C.

▶ It can:

- Be painted with conventional systems if required.

ADVANTAGES

Butyl Sealants are noted in field performance and in laboratory tests for permanent flexibility, outstanding age resistance and resistance to hardening. On the other hand, sealants based on, or containing substantial amounts of unsaturated oils, resins, polymers and bitumen, although initially performing well, will oxidise in time and cure or harden to give stiff or brittle end result. Whereas sealants not based on Polyisobutylene and butyl rubber, will under the influence of heat, vibration, oxygen and ultra-violet radiation, degrade within a comparatively short period of time. South Africa has the highest incidence of U.V radiation in the world (Vereeniging).

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The perfect sealing solution for the cabling, automotive, construction, roofing and industrial industries.



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Hazardous: Non
Dielectric strength: 2.4 kv/mm
Volume resistivity: 7.4×10^{13}
Green buildings specification: < 0.5 mg.m-2.h-1
Non volatile ratio: 99.7 (%)
Storage stability: The sample withstood the 168 hours exposure to a temperature of 45° C without any visual signs of failure.
Low temperature adhesive force: The sample withstood the 24 hours exposure to a temperature of 0° C without any visual signs of failure.
Thermal aging characteristics: The sample withstood the 96 hours exposure to a temperature of 80° C without any visual signs of failure
Low temperature resistance: The sample withstood the 3 hours exposure to a temperature of -40° C without any visual signs of failure.
180° peel test: Conducted a 180° peel test on the samples in the as received condition and after the different temperature storage tests at a cross-head speed of 200 mm/min.

Sample no	As received (N)	Stored @ 45°C (N)	Stored @ 0°C (N)	Stored at 80°C (N)	Stored at -40°C (N)
1	7.9	7.5	7.9	8.1	7.9
2	7.8	7.4	7.4	9.5	8.5
3	7.9	7.7	7.1	8.8	7.8
4	7.7	6.3	7.4	8.1	6.6
Average	7.83	7.23	7.45	8.63	7.70
Spec	20 max	20 max	20 max	20 max	20 max

Formula:

Although Butyl Seal manufactures a product that has common elements in its formula which categorises it as a butyl based product, the formulation used, is solely unique to Butyl Seal (Pty) Ltd. Although we are willing to divulge the raw materials used to make our product (under special circumstances), the process and mixture must at all times be confidential. No other company or entity manufactures our product to the exact same formula or specifications. It is this uniqueness that has guaranteed the success of our product and, the fact that we have never had a quality complaint in 28 years.

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