SIS440 – TECHNICAL DATA SHEET

SIS440 is a high-performing, medium modulus and neutral curing product that cures with exposure to air and moisture in the environment. The product is non-corrosive to all substrates and is extremely resistant to UV and chemical exposure. SIS440 exhibits excellent unprimed adhesion to most properly prepared surfaces and was designed specifically to adhere to the seams in teak decks. TDS produces the same formulation of SIS440 in black, gray, and white.
SIS440 is additionally used for caulking around properly prepared windows in marine applications, sealing hardware to decks, and to create a finished look and watertight seal in hull to deck joints. For other applications where you would like to use SIS440, please contact our TDS product department's technical staff to obtain more information.
Please note that SIS440 is NOT recommended for use beneath the waterline. Regarding varnished decks and brightwork, note that due to the flexible nature of SIS440 that sealed finishes (Varnish, Awlgrip, etc.) will not permanently adhere to our caulk; alternatively SIS440 will adhere to applied varnish and many other finishes. Please contact TDS for further information regarding teak sealers that can be used (if desired) over SIS440 in lieu of traditional varnish or other non-flexible finishes.

Product Properties and Testing Protocols:

SIS440 teak deck caulk has been tested and certified utilizing ASTM standards, please see below. In addition to factory testing, TDS performs extensive testing on every batch of SIS440 manufactured prior to using in our deck production, or for supplying to our customers.

These in-house tests include skin time, curing time, adhesion, color confirmation, modulus, and more. Retains of every batch received are kept for at least 18 months in our lab, so in case of a reported issue we can re-test the same caulk our customer is using. In our over 40 years in the decking business, TDS has learned that there is no substitute for testing and re-testing our products that we both use and supply to our valued customers. It is very important to TDS that the product we supply to customers has our complete confidence prior to it leaving our facility.

SIS440 Relevant Tests and Specifications

Curing Process: Combination Moisture/Temperature Cure

Appearance: Thixotropic Paste - does not sag or drip.

Specific Gravity: 1.1 – 1.4, 1.28 avg. (Actual)

Viscosity: 770 cps (ASTM D2196)

Tack-free time: 20 – 40 minutes "Skin Over" (Measured between 20-25° C / 68-75° F)

Cure Rate: 3mm per 24 hours (Observed @ 25°C / 77°F) **Gray and White caulk will cure at a slower rate, always test for full cure prior to sanding.

Sag/slump: 0.025 in (ASTM C679)

Shrinkage: Black *3% - White/Gray *5% (Observed Average) *Measured - % difference due to compound color in black versus dye in gray/white after curing agent reduction.

Shore A Hardness: 40 (ASTM D2240)

Ultimate Tensile Strength: 300 psi (ASTM D412)

Elongation @ Breaking: 850% (ASTM D412)

Modulus @ 100% Cure: 85 psi (ASTM D412)

VOC: <100 g/l (ASTM D3960)

Temperature Resistance: -60 to 300° F (-51 to 149° C)

Ozone / UV resistance: Excellent / Superior (AST D1149)

Staining of Porous Material: None / No Staining Occurred (ASTM C1248)

Color Change after UV Exposure: None – Negligible (ASTM C510)

Application Temperature: 40 to 90° F (5 to 33° C)

Flash Point: >140° F (>300°C) (ASTM D93)

Storage: Store above 32° F (0° C) and below 80° F (26° C) – never allow to freeze! Avoid storing in direct sunlight, overheated conditions, and conditions that could allow product to freeze.

Product Shelf Life: Sausage Pack: 18 months from DOM

Cartridge: 15 months from DOM

Important Additional Information – SIS440

- SIS440 is manufactured in an ISO9001 facility which assures quality and consistency.
- SIS440 is a high-quality polymer that is specifically designed for the marine environment and meets or exceeds Federal Specifications TT-S-00230C, TT-S-001543A and has qualified for ASTN C920 certification.
- SIS440 being a neutral cure sealant, can be used to seal a great many substrates without causing corrosion, staining, or discoloring. SIS440 is safe to seal electronics and has excellent insulating properties.
- SIS440 is a purpose-made product for caulking teak decks and other approved substrates and has been certified in testing to have the highest UV and chemical resistance when compared to competing products. This has been proven by customer testimonials where SIS440 is still viable after more than 20 years.
- SIS440 has the longest shelf life (when stored according to recommendations) compared to any marine deck caulk on the market.
- TDS SIS440 is the only deck caulking available in the Marine Market offered in black, gray, and white, all utilizing the same dependable and proven formula. SIS440 is so versatile that, besides its well-known use as a superior deck seam sealant, it can be successfully used to seal windows, hatch joints, between decks/hulls, for bedding hardware, to seal or provide sealing or additional sealing for electrical components, sealing around the edge of natural stone tiles.
- SIS440 forms a protective skin quickly – after 20 – 40 minutes, which then will protect the work area against moisture contamination. After an overnight cure, most surfaces can be safely walked on.
- SIS440 includes additives that discourage the growth of mold and mildew.
- TDS offers expert technical support for SIS440 and all the products we sell. Please contact us via email or phone for application questions, potential problems, or anything not covered in our supplied documentation.

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