

Specification data

4060 Bridge View Drive, N. Charleston, SC 29405

Phone: (843) 566-1225 Fax: (843) 566-1275 E-mail:boatlife@boatlife.com www.boatlife.com

LIFE-CALK[®] ONE-PART POLYSULFIDE BASE CAULKING AND SEALANT

PRODUCT DESCRIPTION

Life-Calk[®] is a one-part polysulfide base caulking and sealant designed for caulking and sealing all joints with structural movement to produce a firm, flexible, and watertight seal in the marine environment. It bonds to fiberglass, wood, metal and glass. Life-Calk[®] is ready to use as packaged. It is easily applied by using an open type caulking gun, putty knife, or spatula. It cures to a firm flexible rubber with excellent waterproofing and adhesive properties.

SPECIFICATIONS

Life-Calk[®] meets or exceeds the requirements of Federal Specifications ASTM-C 920. The cured properties of Life-Calk[®] meet or exceed the requirements of ASA Specifications A116.1 1060 and Federal Specification TT-S-227b(1). Military Spevifications C- 18255E (Ships).

TECHNICAL DATA

Application Properties Base Compound		Polysulfide			
Colors		White, Black, Mahogany, Teak Brown			
Consistency		Gun Grade			
Nonvolatile content		96-98%			
Tack Free Time	K Free Time 24 hrs @ 75° F, 50% Relative Humidity				
*Cure Time	1/8" thickness	10 days @ 75° F, 50% Relative Humidity			
	1/4" thickness	20 days @ 75° F, 50% Relative Humidity			

PERFORMANCE PROPERTIES

Hardness, Shore Durometer	26		
Shrinkage	negligible		

Adhesive strength in tension and ultimate elongation after complete cure. (Test specifications consisted of two small teak blocks primed with **BoatLIFE Life-Calk**[®] **Primer**, sealed with a seam of Life-Calk[®] $\frac{1}{2}$ " x $\frac{1}{2}$ " x 2")

	Adhesion	Elongation
75°F	80psi	200%
	70psi	150%
75°F after 21 days in water	50psi	150%

LIFE-CALK® ONE-PART POLYSULFIDE BASE CAULKING AND SEALANT <u>PERFORMANCE PROPERTIES CON'T.</u>

Page 1 of 3

Tensile strength and ultimate elongation (tested in accordance with ASTM D 412)

	Tensile Adhesion	Ultimate Elongation		
75°F	170psi	500%		
	190psi	350%		
Temperature Range	-40°F to 2	-40°F to 200°F		

QUANTITY ESTIMATION

Lineal Feet p	er Cartridge	W	WIDTH OF JOINT			
		1/8"	1/4"	3/8"	1/2"	3/4"
DEPTH	1/4"	60	29	18	15	10
OF	3/8"	37	18	15	10	7
JOINT	1/2"	29	15	10	7	5
	3/4"	18	10	7	5	3.5

JOINT EXPANSION

It is recommended that dimensions be established for each joint in conformance with service conditions. Width of joint may be determined by calculating expansion and contraction of limits of the structure during temperature extremes and multiplying by a factor of 4. For example, if a joint will open and close $\frac{1}{4}$ " under temperature extremes, the joint should be designed $\frac{1}{4}$ " times 4, or 1" wide. No joint should be less than $\frac{1}{4}$ " wide.

INSTALLATION

PREPARATORY WORK

The sealant bonding surfaces should be sound, clean and free of contamination such as release agents, water repellent treatment or other surface contaminants. Where adverse conditions are suspected, sanding is advisable.

METHOD OF APPLICATION

Life-Calk[®] can be applied directly from cartridges or bulk pails.

APPLICATION PROCEDURES

- 1. Clean joints and wash with Life-Calk® Solvent and Cleaner.
- 2. Apply bond breaker.
- 3. Apply BoatLIFE Life-Calk[®] Primer.
- 4. Apply Life-Calk[®] with a hand or air operated caulking gun, putty knife or trowel, pushing cartridge away from you.
- 5. Tool seam.

CAUTION: DO NOT OPEN CONTAINER UNTIL READY TO USE

NOTE: It is important that the sealant be tooled to assure complete wetting of the bonding surface in order to obtain maximum adhesion. Care should be taken not to disturb the seal until completely cured.

LIFE-CALK® ONE-PART POLYSULFIDE BASE CAULKING AND SEALANT <u>PERFORMANCE PROPERTIES CON'T.</u>

*CURE: Since Life-Calk[®] sealant is a moisture/temperature cure and requires the absorption of moisture from the surrounding atmosphere, an increase in the relative humidity or submersion in water will result in a shorter tack free time and faster cure.

CLEANING OF EQUIPMENT: Wash equipment and tools with **BoatLIFE Life-Calk**[®] Solvent and Cleaner or **Release**[®] before material cures.

► TESTING IS RECOMMENDED.

Life-Calk[®] is also paintable and sandable after complete curing occurs. Since curing time varies with the environment test a small area of the caulking. If the paint does not dry in a reasonable amount of time, a latex primer can be used. Do a second test of a small area.

*Note: Curing time will vary based on temperature, relative humidity, and age of product.

Life-Calk[®] One-Part - Rev. 01/09 Page 3 of 3