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## **LIFE-CALK<sup>®</sup> TYPE P (POURABLE) TWO-PART POLYSULFIDE RUBBER**

### **PRODUCT DESCRIPTION**

BoatLIFE Life-Calk<sup>®</sup> Type P is recommended where strong flexible, weather resistant and salt water resistant caulking compound is required to seal non-sloping decks of all types of marine craft. It is a two-part polysulfide polymer that cures at ambient temperature to form a firm resilient rubber seal. Specifically formulated to have excellent flow properties and it can be easily poured or injected into all horizontal joints and seams. Its consistency also reduces the possibility of air entrapment. The cured product resists bubbles and blister formations that are of particular importance when sealing seams of wood planks such as on aircraft carriers. In addition to its excellent application properties, BoatLIFE Life-Calk<sup>®</sup> Type P assures a permanent seal because it is resistant to oils, fuels and gasoline and will retain its high tensile strength and outstanding elongation properties, even after prolonged exposure to weathering.

### **SPECIFICATIONS**

BoatLIFE Life-Calk<sup>®</sup> Type P meets or exceeds the requirements of Federal Specifications TT-S-0027-Type I, and Military Specifications C-18255E (Ships)-Type I.

### **TECHNICAL DATA**

#### Application Properties

Base Compound	Polysulfide
Color	Black
Accelerator	Reddish Brown
Mixing Ratio	28:1 by weight 12:1 by volume when mixed at nozzle by machine
Nonvolatile Content	97%
Viscosity	
Brookfield Spindle #7 at 1 rpm	13
Consistency	Thick Pourable Liquid
Application Life	1 hour @ 75° F, 50% Relative Humidity
Tack Free Time	3 hour @ 75° F, 50% Relative Humidity
*Cure Time	24 hours @ 75° F, 50% Relative Humidity
*(To 26 Shore Hardness)	72 hours
VOC – Part A	5%
VOC – Part B	0%

### **PERFORMANCE PROPERTIES**

Specific Gravity	1.59
Hardness, Shore Durometer	30
Shrinkage	2.8%
Tensile Strength (ASTM D412)	465 PSI
Ultimate Elongation (ASTM D412)	700%

**Life-Calk®, Type P POLYSULFIDE BASE CAULKING AND SEALANT  
PERFORMANCE PROPERTIES CON'T.**

**TENSILE ADHESION AND ULTIMATE ELONGATION**

	<b>Tensile Adhesion</b>	<b>Ultimate Elongation</b>	<b>Type of Break</b>
<b>DOUGLAS FIR</b>			
Initial *(Cured 96 hours @ 75° F)	207	420	Cohesive
After 7 days @ 158° F	156	320	Cohesive
After 4 days immersion in 10% salt water	195	240	Cohesive
<b>TEAK</b>			
Initial *(Cured 96 hours @ 75° F)	190	430	Cohesive
After 7 days @ 158° F	175	355	Cohesive
After 4 days immersion in 10% salt water	165	345	Cohesive
Swell in 100% iso-octane (Medium No. 4 Fuel, Federal Test Method Std. 601, Method 6001)	2.0%		
Low Temperature Flexibility	- 40° F		
Temperature Range	- 40° F to + 225° F		
Resistance to Salt Water	No cracks, softening, peeling or chalking		
Resistance to Hydrocarbons, Fuels and Oils	Excellent		
Resistance to Weathering	Excellent		

**NOTE:** The above application and performance property values are typical for the material, but not intended for use in specifications or for acceptance inspection criteria because of variations in testing methods, conditions and configurations.

Minimum seam requirements are 1/8" wide by 1/4" deep.

**APPLICATION PROCEDURES**

**WOOD**

The surface must be dry, clean, and free of all old caulking materials. Cut back weathered surfaces or rot by routing, sanding, or sawing to solid wood. Rotted wood maybe treated with "Git"-Rot®. When new wood is coated with preservatives, such as Woodlife®, the surface must be thoroughly sanded before application. We recommend a thorough washing with **BoatLIFE Life-Calk® Solvent and Cleaner**.

**METAL**

The surface must be dry, clean, and free of corrosion, mill scales, rust, oil, paint, and all old caulking material. Remove corrosion by sandblasting, wire brushing, and grinding or chemical corrosion remover. Rusted surfaces may be treated with "Git"-Rust®. When using chemical corrosion removers, thoroughly rinse away all traces of chemicals and thoroughly dry. Cleaning of corrosion-free metal may be accomplished with **BoatLIFE Life Calk Solvent & Cleaner**. When using an oil-free solvent (reclaimed solvents should not be used), a progressive cleaning procedure should be used. Wash a small area at a time, then dry with a clean cloth before the solvent evaporates to prevent contaminants on the surface. Always pour the solvent on the washing cloth to maintain a clean solvent supply.

## **Life-Calk®, Type P POLYSULFIDE BASE CAULKING AND SEALANT PERFORMANCE PROPERTIES CON'T.**

### **SEAM FILLERS**

Where necessary, seams should be packed with **BoatLIFE Bondbreaker** standard caulking cotton, untreated jute, or some other compressible filler material. It is very important that seam fillers are not impregnated with oil or bituminous materials.

### **APPLICATION LIFE**

Application life is the period of time that the mixed compound remains at a consistency suitable for application with a spatula or caulking gun. Application life is always based on standard conditions of 75°F and 50% relative humidity. For every 10°F rise in temperature, the application life is reduced by half and for every 10°F drop, it is doubled. Higher humidity at the time of mixing shortens the application life.

### **\*CURE TIME**

Cure time, or the period of time required for the mixed compound to become firm and rubbery, is 72 hours at 75°F and 50% relative humidity. Variations in the rate of cure time may be due to temperature and humidity changes, since each 10°F increase in temperature above 75°F speeds the cure rate by 50% and each 10°F decrease in temperature slows the cure rate by 50%.

### **CLEANING OF EQUIPMENT**

Wash equipment and tools with **BoatLIFE Life-Calk® Solvent and Cleaner** immediately after use or before material cures. Remove cured material by scraping, wire brushing and/or soaking in commercially available stripping compounds. Remove compound from hands by scrubbing with soap and stiff bristled brush.

### **HEALTH PRECAUTIONS**

BoatLIFE Life-Calk®, Type P is proven to be safe material when handled with reasonable care. The sealant accelerator contains a lead compound. Avoid repeated or prolonged contact with the skin, especially contact with open breaks in the skin and ingestion. Always wash hands before eating or smoking. If sealant accelerator contacts the skin, flush with warm water. Obtain medical attention in cases of extreme exposure or ingestion.

For best results, use within one year of date of manufacture. The manufacture date is indicated on the product in the batch#. The first two digits are the month, the third digit is the year and the fourth and fifth digits are control numbers.

### **QUANTITY ESTIMATION**

#### **Lineal Feet per Cartridge (Approx.)**

#### **WIDTH OF JOINT**

<b>DEPTH OF JOINT</b>	<b>WIDTH OF JOINT</b>					
		1/8"	1/4"	3/8"	1/2"	3/4"
1/4"		60	29	18	15	10
3/8"		37	18	15	10	7
1/2"		29	15	10	7	5
3/4"		18	10	7	5	3.5

**Life-Calk® , Type P POLYSULFIDE BASE CAULKING AND SEALANT  
PERFORMANCE PROPERTIES CON'T.**

BoatLIFE Life Calk®, "Git"-Rot®, "Git"-Rust® BoatLIFE Life Calk® Solvent & Cleaner are registered trade names of Life Industries Corporation. (Woodlife® is a registered trade name of Woodlife)

**\*Note: All curing time subject to atmospheric conditions.**