

## Questions and Answers About

# LIFE-CALK

**Q** Must I wait for LIFE-CALK to completely cure before I can put my boat in the water?

**A** No, LIFE-CALK will cure under water even though painted over.

**Q** Must I remove all old caulking cotton before applying LIFE-CALK?

**A** No. Not unless the cotton is oil soaked. Seam should be routed 1/4" deep and should be a minimum of 1/8" wide, preferably with clean wood each side. Leave old cotton as a back-up material. If old cotton is oil soaked, remove, wash seam with LIFE-CALK Solvent or acetone. Refill with fresh cotton, prime and apply LIFE-CALK.

**Q** If the seam is too deep, can cotton be used to partially fill it?

**A** Yes, LIFE-CALK or any other polysulfide type material is much too expensive to completely fill the seam the thickness of the plank besides it is unnecessary. Minimum seam is based on an area of 1/8" wide by 1/4 "deep. On heavy hulls increase depths to 3/8"

**Q** At what temperatures can I apply LIFE-CALK?

**A** LIFE-CALK, either One or Two Part, may be applied at any reasonable temperature, however the colder the temperature the longer the cure time. Do not apply on frosty surfaces.

**Q** In case I spill LIFE-CALK on my deck or need to clean up tools, what do I use for a cleaner?

**A** Use BoatLIFE LIFE-CALK Solvent, a specially blended solvent for use with LIFE-CALK, however, acetone or lacquer thinner can be used with fair results.

**Q** Can LIFE-CALK be applied over a damp surface?

**A** One Part LIFE-CALK can be applied on a damp surface provided it is non-oily. Two Part LIFE-CALK must be applied to dry wood for best results.

**Q** When using One Part LIFE-CALK, must I use the entire tube?

**A** No, the tube can be resealed with a wood screw. Some of the LIFE-CALK in the nozzle will cure on the threads of the wood screw, so when ready to reuse, pull out the wood screw and the nozzle will be cleared, as LIFE-CALK will not adhere to the special nozzle material.

**Q** Is there any difference between colors of LIFE-CALK? If so, which is best?

**A** There is no difference in performance all colors are the same. White is the most popular as it can be used for many topside applications. Mahogany is used for bright-work sealing. Mahogany and black are used for hull work. Black is used for teak decks. It is also available in Teak Brown.

**Q** Can apply LIFE-CALK below the waterline?

**A** Yes, both One and Two Part LIFE-CALK are excellent for sealing all seams both below and above the waterline. One Part LIFE-CALK can even be applied under water in an emergency to a seam. Two Part LIFE-CALK must be applied to dry surface.

**Q** Why is LIFE-CALK different from other types of rubber caulking such as the silicones?

**A** LIFE-CALK is a polysulfide long life synthetic rubber made from Thiokol's LP polymer. It is non-shrinking, flexible and easy to use. It chemically cures to rubber which adheres tenaciously to practically any type of clean substrate such as wood, fiberglass or metal. It can be sanded, painted and in the case of the One Part, even applied under water in an emergency.

**Q** Is Two Part LIFE-CALK better than One Part, and if so, in what way?

**A** Not necessarily, One Part and Two Part LIFE-CALK are chemically the same when cured. Two Part cures faster through use of a catalyst however mixing is a chore. One Part eliminates the mixing but requires a longer period of cure time. Spraying with water or submersion can speed up cure of the One Part.

**Q** When sanding LIFE-CALK does the sand paper clog up?

**A** No, cured LIFE-CALK can be sanded without paper becoming clogged. Sandpaper will last indefinitely.

**Q** To use LIFE-CALK must you get down to bare wood, fiberglass or metal?

**A** Not necessarily, LIFE-CALK will adhere tenaciously to practically any well bonded surface, however, clean wood, fiberglass or metal eliminates the possibility of the original coating parting from the substrate.

**Q** What about applying LIFE-CALK to lapstrake seam?

**A** LIFE-CALK is excellent for lapstrake seams, especially if the boat gets trailed and has insufficient swell-up time.

**Q** How would I apply to a lapstrake seam?

**A** Gouge out under the lap with a sharp tool or sharpened beer can opener to create a triangular void with side of 3/16 to 1/4 inches. Fill void with LIFE-CALK and finger smooth or use round end tool to finish joint. Joint can be painted immediately.

**Q** How much material would I use for the average lapstrake seam?

**A** As a guide, figure 60 to 80 lineal feet per cartridge of One Part or 140 to 180 lineal feet per 2½lb unit of Two Part LIFE-CALK.

**Q** When is it necessary to prime?

**A** The long life of both One Part and Two Part will be extended when a primer is used, however for practical purposes, no primer is necessary except on oily woods, including teak. A Garboard seam of a motorboat has a tendency to pick-up oil from the bilge water and should always be primed for best results.

**Q** What type of primer should be used?

**A** Use only the primers designed for LIFE-CALK, LIFE-CALK Primer. For Practical purposes, LIFE-CALK Primer is the most commonly used. Do not use any other primers as other material may not be compatible with LIFE-CALK and unsatisfactory results may be obtained.

**Q** How is Primer used?

**A** Apply LIFE-CALK Primer sparingly with a small brush or Q-Tip after seam has been thoroughly cleaned with LIFE-CALK Solvent or acetone and allow to dry for about an hour at 70° or slightly longer at cooler temperatures. After primer is dry apply LIFE-CALK.

**Q** How soon after applying LIFE-CALK can I paint?

**A** Painting can be done once the surface cure has taken place. LIFE-CALK will continue to cure even under the paint. Boat can be launched as usual. LIFE-CALK will continue to cure under water.

**Q** When sanding is required, how soon after applying LIFE-Calk will I be able to sand?

**A** Surface cannot be sanded until the LIFE-CALK is cured. One Part LIFE-CALK will cure in 3 days to a week in moderate temperatures, longer when cold. Two Part LIFE-CALK will cure in 1 to 2 days in moderate temperatures, longer in cold areas.

**Q** In future years, can I repair any voids or damaged areas of LIFE-CALK?

**A** Yes, LIFE-CALK, either One Part or Two Part will marry to previously cured material with a bond as strong as the original. Old material does not have to be removed as long as it is LIFE-CALK.

**Q** Is the use of LIFE-CALK mainly used or restricted to wood?

**A** No, LIFE-CALK can be used on metal, fiberglass, glass, canvas, plastic and many others materials besides wood.

**Q** Can LIFE-CALK be used as adhesive as well as a sealant?

**A** Yes, LIFE-CALK has many uses as an adhesive as well as a glazing and a bedding compound. When using as a sealant, mechanically fasten until LIFE-CALK is fully cured.

**Q** Can I repair my ripped canvas deck with LIFE-CALK?

**A** Yes, cross slit canvas, pull back and re-bed in LIFE-CALK, tack down with copper tacks and allow to cure. After LIFE-CALK is cured, sand surface without removing tacks. The repair will become invisible and completely waterproof. Surface is ready for repainting.

**Q** What is the advantage of bedding with LIFE-CALK?

**A** LIFE-CALK has a unique advantage over any other bedding compound. Any time a piece of hardware must be removed or a joint reopened, LIFE-CALK can be cut with a sharp knife and the joint is free. To rejoin, simply apply a small amount of new LIFE-CALK and the surfaces will marry again.

**Q** Will gasoline or oil affect LIFE-CALK?

**A** No, after material is cured, gasoline, oil or most chemicals will not affect LIFE-CALK. LIFE-CALK can even be used as a tank sealant, as it is widely used in the aircraft industry as a wing tank and cabin sealant under the PRC label.

**Q** If I use LIFE-CALK on my wooden boat is it advisable or necessary to fiberglass over it.

**A** No, fiberglass should never be used on a wood boat except as a last resort. If LIFE-CALK is properly applied all seams and voids will be absolutely water-tight and still the wood can work (swell and contract) without the hull leaking. Fiberglass is too hard and does not swell and contract as wood, therefore after a period of time a parting of the two materials will occur.

**Q** How wide a seam can I apply LIFE-CALK to?

**A** LIFE-CALK has been applied successfully to joints as wide as 5/8", however the width should never exceed the depth, no seam should be less than 1/8" wide x 1/4" deep. If a wide seam is necessary, clean out joint deeper than normal and prime.

**Q** How can I tool a finished joint when using LIFE-CALK?

**A** Many tools can be to create a finished joint such as a putty knife, tongue depressor, metal or plastic spoon or even a finger. Hands should be thoroughly washed after being exposed to LIFE-CALK.

**Q** On a carvel hull, how many feet of seam will I get out of a cartridge of LIFE-CALK?

**A** One cartridge of LIFE-CALK will fill a minimum seam 1/8" x 1/4" about 55 to 60 feet long.

**Q** Can I lay my new canvas deck in LIFE-CALK and expect a long and water tight life?

**A** Yes, canvas laid in LIFE-CALK and painted with either Rub-R-Coteor durable plastic finish provides an excellent long life deck or cabin top covering and yet, eliminates the problems of installing fiberglass. If the wood, over which the canvas is laid, is calked with an oil base compound, the seams should be routed out and recaulked with LIFE-CALK. LIFE-CALK, either One Part or Two Part (Type P) should be spread with a tooth or notched trowel. The canvas is then pressed into the compound. Due to the high adhesive qualities of LIFE-CALK no tacking is necessary to hold canvas in place.

**Q** Can centerboard trunk joints be sealed from the inside?

**A** Yes, LIFE-CALK can be gunned directly into the centerboard trunk joints from the inside if the entire joint is accessible.

**Q** If I use too much LIFE-CALK, will loosen the fastenings, when the hull swells?

**A** No, it is impossible for LIFE-CALK to loosen the fastenings, as the planks swell, the LIFE-CALK will bulge out due to the smaller seam created, however, no strain will be on the planks a LIFE-CALK has what is commonly named "cold flow" which means it will adjust and relax without keeping a tension or compression force.

**Q** Is LIFE-CALK difficult to apply?

**A** No, Installation of LIFE-CALK requires no skill, if the preparation and instructions have been properly carried out. It can be done by anyone who can stuff paste into a crack.

**Q** The price of LIFE-CALK is higher than most other caulking's. Why should I buy it?

**A** Price is a relative thing. Material is the cheapest part of any repair job. Using LIFE-CALK, you are assured of a tight hull for years to come. Labor in succeeding years is eliminated so in the long run LIFE-CALK is the most reasonable treatment you can apply to your boat.

**Q** On teak decks, should I tape the seams?

**A** Yes, it is advisable to tape joints on a teak deck unless the entire deck is to be sanded after LIFE-CALK is fully cured. If tape is used, it should be removed immediately after joint is tooled and before material cures.

**Q** When is it advisable to use Two Part Type P LIFE-CALK?

**A** Type P Two Part LIFE-CALK is used to fill horizontal deck seams when boat can be made level. The advantage is speed of application and elimination of tooling. The material can be poured directly into the seam and is self leveling. Since a catalyst is used with Type P, the cure time is cut down, however mixed material must used up.

**Q** Can I speed up the curing cycle of One Part LIFE-CALK?

**A** Yes, spraying frequently with water or submerging can speed up curing cycle.

**Q** How come the One Part LIFE-CALK cures without using a catalyst?

**A** Actually the One Part LIFE-CALK does use a catalyst. To understand the curing cycle, an oversimplification is as follows: The base material is mixed with a dry catalyst and is desiccant. It is packaged in a moisture free atmosphere.

When the user expels the material from the tube the desiccant picks up the moisture from the air, allows the catalyst to dissolve and the chemical action of catalyst and base material starts.

**Q** When I use Two Part LIFE-CALK, Type H or P, must I use up all of it that is mixed or can I save some for later use?

**A** Usually when Two Part LIFE-CALK is mixed it is advisable to use it up quickly before the chemical action goes to far and material can no longer be tooled. Two Part can be mixed and saved provided it is immediately quick frozen in a dry ice cabinet or refrigerated at  $-40^{\circ}$ . It can be thawed and used in the conventional manner.

**Q** Individual sealants are made specifically for fiberglass, wood or glass, which are in the silicone family. How do they compare with LIFE-CALK?

**A** First, LIFE-CALK is not a silicone and therefore can be sanded, painted and used under water which silicone cannot; second, why use specialized sealants when one product be used for all applications?

**Q** Is LIFE-CALK limited to marine applications?

**A** No, LIFE-CALK can be used for 1001 other applications such as swimming pools, concrete joints, window glazing, leaky pipes, bathtub tile joints and many others. Actually LIFE-CALK'S usage is only limited to one imagination.