0816KB/0826KB ***Silicone Shield Sealants FAQ***

- ***What is the base chemistry for 0816/0826KB Silicone Sealants?*** *Acetoxy cure silicone.*

- ***Do these silicones carry FDA or UL listing?*** *No.*

- ***What total joint movement are these silicone formulas designed to provide?*** *50% total joint movement (+/- 25%).*

- ***What is the recommended temperature range for application?*** *Product will apply from 10F to 100F. For best results, apply between 40F & 90F, to clean, dry surface.*

- ***What is the typical service temperature range for 0816/0826KB?*** *-60F to 400F (See TDS for additional details related to intermittent temperature exposures).*

- ***What does Acetoxy cure mean?*** *During the curing process from a putty-like material to a rubber-like elastomeric material, acetic acid is given off as a by-product. Acetic acid corrodes some soft metals (like brass or copper) & therefore should not be used in tandem w/ these substrates. Acetic acid has an odor similar to vinegar & is the most common of all silicone sealants sold.*

- ***What does neutral cure mean?*** *Neutral cure indicates that a non-corrosive or benign by-product is released during cure of the silicone sealant. The by-product may be an alkyl alcohol or a methyl alcohol. There are several neutral cure alternatives.* ***Oxime*** *(Red Devil): is the most common, is non-corrosive & low odor.* ***Alkoxy****: (Sometimes called a Tin Cure) is less common than Oxime, is non-corrosive, low-odor & is usually low to medium modulus.* ***Alkoxy/Titanium*** *is the least common, is non-corrosive & low-odor. It is usually low or medium modulus & represents the base chemistry for some of the Fire-Stop Silicones.* ***Methoxy*** *(Also a Tin Cure) is low-odor, non-corrosive & is typically low or medium modulus.*

- ***Is this silicone sealant series paintable?*** *No.*

- ***Can this silicone sealant series be used in a submerged/water immersion application?*** *Not recommended, as over time, water will seep into the bond-line area & adhesion failure may result.*

- ***What is ARC Resistance?*** *It denotes the resistance of a material to an arc produced by a current of electricity flowing between two electrodes.*

- ***What is Dielectric?*** *An electrical term denoting the ability of a substance to resist a charge of electricity as compared to the ability of air in this regard. Silicones are excellent dielectric materials.*

- ***What is meant by dissipation factor?*** *The measure of the quality of an insulating material. The lower the figure, the better the insulator.*

- ***What is Dielectric Strength?*** *Measurement of the amount of voltage an insulative material will withstand before breaking down & losing its insulative capabilities.*

- ***What is meant by RTV?*** *Room temperature vulcanizing – refers to the ability of a material to cure or harden to a solid substance, w/o the application of heat.*

- ***What is refractive index?*** *The amount of light beam is refracted (or bent) as it passes through a substance, as compared to water being 1.0.*

- ***What are silanes?*** *Silicon chemicals. Silicones are made from silanes by a chemical process.*

- ***What is surface tension?*** *An effect of the forces of attraction existing between the molecules of a liquid. It exists only on the boundary surface of the liquid. These formulas have low surface tension.*

- ***At what temperature does 0816/0826/KB silicone sealant become brittle?*** *– 80F (ASTM D746)*

- ***What are some limitations of 0816/0826/KB?*** *Will corrode copper, brass & other copper-containing alloys; magnesium, zinc & galvanized metals (& other zinc-containing alloys). These KB formulas are not recommended for use on brick, masonry & other cementitious substrates. Best adhesion & compatibility not achieved w/ substances made of methylmethacrylate (Plexiglas), polycarbonate, polypropylene, polyethylene & polytetraflouroethylene (Teflon). These KB formulas are not recommended for below-grade applications or for joints w/ over +/- 25% joint movement. Formulas not intended for structural glazing applications. Formulas not recommended for areas where abrasion & physical abuse are encountered.*

- ***What is the typical tack free time of these KB formulas?*** *20 minutes (77F/50% RH).*

- ***How quickly must these formulas be tooled?*** *Tooling should be completed within 5 to 10 minutes of application.*

- ***How does a partially enclosed area of application effect cure time for these formulas?*** *In applications where material may be partially or totally confined during cure, the time required for proper cure is lengthened by the degree of confinement. It is possible that w/ absolute confinement, cure will not be completed. The result can be the softening of the sealant @ elevated temperatures. Curing time*

increases w/ the thickness of the sealant. A ½" cross-section may require 3-4 days for complete cure, however the cure will have penetrated the outer 1/8" in about 24 hrs.

- ***What is the approximate Peel Strength of these KB formulas?*** *For typical substrates encountered in KB applications, sealants have an average peel strength of approximately 10 to 20 lbs per inch after 72 hrs @ RT.*

- ***What is the odor w/ these 0816/0826KB sealants?*** *Vinegar-like odor during application & cure – no odor following full cure.*

- ***How can the best possible bond be achieved w/ these KB Sealants?*** *Thoroughly clean & dry surface, free of any contaminants, prior to application.*

- ***Do these KB formulas contain Formaldehyde?*** *Formaldehyde is not added as a part of the formula; however Formaldehyde vapors are formed @ temperatures above 300F in the presence of air. Formaldehyde is a potential cancer hazard & known skin & respiratory sensitizer. Vapors irritate eyes, nose & throat.*

- ***What is the typical shelf life of these KB Silicones?*** *Stored in original, unopened containers @ 72 to 77F, should see excellent stability for a minimum of 12 months.*

- ***How do I remove these silicone sealants from clothing?*** *This is difficult, if not impossible. There are silicone sealant removers available, however directions & precautions provided by the manufacturer must be closely followed for the remover chosen.*

- ***How do I remove these silicone sealants from skin?*** *If the sealant is not cured/still sticky, wipe the area thoroughly w/ a clean, dry cloth or towel, before washing area w/ soap & warm water. Do not use solvent on skin. It may take 3-4 days for the entire residue to be removed, peeled off or to wear off. Do not handle contact lenses during this time.*

- ***What should be done if contact lens irritation takes place after using silicone sealant?*** *Lens should be cleaned in an enzyme solution. Do not touch lenses until all silicone has been removed from fingers, nails & hands. Residual silicone may remain on hands for several days & be transferred to lenses. All sealant should be removed prior to re-insertion of lenses. Seek medical attention if irritation persists.*

- ***What should I do if a child or pet eats or tastes this silicone sealant?*** *Seek medical attention immediately or contact INFOTRAC @ 800-535-5053.*

- ***Can these silicone sealants be used as a barrier for gases (Oxygen, Carbon Monoxide, etc) to keep gases in or out?*** *No – silicone sealants are vapor-permeable & will not form a hermetic seal.*

- ***Typically, how long will these silicone sealants release an odor?*** *These silicone sealants outgas during cure. Most occurs during the first 24 hrs after application, however depending on the application, atmospheric conditions, etc., minimal out gassing/odor can sometimes occur for up to a week. (If vapor is irritating, provide adequate ventilation until full cure or wear the appropriate respirator.*

- ***How can I prevent silicone sealant from curing in the cartridge?*** *These silicones are condensation cure products; hence the only way to prevent curing is to protect them from the atmosphere. For cartridges, insert a nail into nozzle hole or squeeze out a bead of silicone above the nozzle tip & wrap plastic tightly over the silicone & nozzle.*

- ***Where can additional information be found on 0816KB/0826/KB silicone sealants?*** *See MSDS & TDS on this website (www.reddevil.com)*