

Glossary - Closures

APPLICATOR CAP - A closure with attached applicator to apply the contents of the container.

BACKING LINER - The compressible paper material, usually pulp or news board, to which the facing liner is attached or adhered. This compressible paper material compensates for any irregularities on the sealing surface.

BAKELITE - A trade name applied to synthetic resin. Its uses are similar to those of hard rubber and celluloid.

BEAD - Either a depressed or raised circular (ring) configuration in the top of the cap. May be a full radius, or in some constructions a flat circular channel.

BEADED CAP - A cap having a construction featuring a bead of some design in its panel or top surface.

CELLULOSE BAND (CELON) - A band made of hydrated cellulose film that is extruded in continuous tubing form. The cellulose tubing is then processed and printed in this form and cut into individual bands of predetermined lengths. When the Celon is applied to the finished of the container, it is allowed to air dry. During this air-drying period it shrinks to form a skin-tight film over the finish of the bottle.

CEL-O-SEAL - The tamper-proof plastic neckband covering container neck and closure skirt. Can be printed with a sales message.

CHANNEL - A depressed configuration in the top of the cap added for strength, stacking purposes, retainer for Plastisol, etc. The sides are sloping or of a radius construction, and the depressed section is flat.

CHILD-RESISTANT CLOSURES (CRC) - There are several types that have been developed for products that constitute a hazard to small children. Basic principles of CRC's are (1) press-turn; (2) squeeze-turn; (3) combination-lock and hidden tab.

CHUCKS - Component of a capping machine that holds the closure for application to the container.

CLOSURE - Any structure or device that is designed to close off the opening of a container and prevent loss of its contents.

COATING - A layer of varnish, inks or other organic material that has been applied in fluid form and dried, united with or adhered to the surface of the metal from which the closure will be made.

COMPO - A flowed latex compound or ground cork particles adhered and used as a liner in a closure.

CONTINUOUS THREAD (CT) - A continuous spiral-projecting glass, plastic or metal ridge on the finish of a container intended to mesh with the thread of a screw-type closure.

CORK - The light, tough bark of the cork oak tree used as a compo or plug fashioned for a closure or its liner.

CROWN CAP - This is a crimped closure. Flutes are pressed into the flaring skirt of a shallow metal disk, which holds an inner disk of resilient lining material that forms the actual seal.

CROWN FINISH - The finish used on beer and beverage bottles sealed with a crown cap.

CURL - Tubular structure formed at the open end of a metal closure to provide a smooth, strong edge and to facilitate automatic handling of the closure.

DEEP SCREW CAP - A cap having a deeper skirt (more "H") and generally a heavier thread than the 400 finish series.

DOME - A closure that has a rounded top surface.

DROPPER CAP - A container closure that includes a dropper with a rubber bulb.

"E" DIMENSION - On a threaded bottle neck (finish), it is the outside diameter of the neck; the diameter of the neck (finish) measured across the root of the threads.

EFFECTIVE THREADS - The amount of thread (turns) in a closure that is actually in contact with the bottle thread, when the closure is fully tightened on the bottle neck (finish).

EMBOSSING & DEBOSSING - Embossing creates a design on the closure surface by raising the letters through pressure or dies. Debossing is lowering portions of the surface in a like manner.

FACING LINER - The liner material that is attached or adhered to the backing liner and acts as a barrier to any chemical reaction of the product.

FITMENTS - Any additional or extended part of a container such as a bail, handles, nozzle, flange, plug, etc.

FLANGE - The part of the stamped shell used to form the wire. The right angle extension of the skirt at the open end of the shell.

FLAT TOP - A cap or shell in which the top surface is relatively flat and without any embossing on the surface.

FLOATING LINER - A liner that is not adhered to the inside of the closure.

FLOWED-IN - Term used to describe method of applying fluid sealing compounds with a nozzle.

FRICTION CAP - A closure designed to be held on by friction upon application to container, building up resistance to movement of closure.

GPI - Glass Packaging Institute. An organization of almost all glass container producers that establishes policies such as standardization and develops industry-advertising programs.

GASKET - A liner applied between adjoining parts to effect a tight seal.

"H" DIMENSION - The height of the bottle finish, measured from the sealing surface, in a line parallel to the axis of the finish and tangent to the threads on the finish, down to a point where the line intersects the body (shoulder) of the container. Also, the inside height of the closure, measured from the bottom of the closure, in a line tangent to the threads of the closure and terminating at the inside, top of closure.

HEAT SEAL - A process of uniting two or more surfaces by fusion, either of the coatings or of the base materials, under controlled conditions of time, temperature, and pressure.

HOT STAMP - The application of heat and pressure to die molds to fabricate or decorate a molded product.

"I" DIMENSION - A specified minimum diameter inside the bottleneck. A minimum diameter is specified that will allow sufficient clearance for filling tubes to enter the bottleneck easily.

"I.D." - Abbreviation of Inside Diameter.

INNER SEAL - An extra seal comprising a sheet that is resistant to water vapor or vapor from some specific chemical, and adhered to the top end of a container below the regular cover or closure, to give added protection to the contents.

INTERNAL THREAD - Threads on the interior of a closure.

INTERRUPTED THREAD - Threads on the finish of glass containers that are not continuous.

KNURL - Indented or crimped portion of the skirt at top of cap used for holding liner in cap, used as a grip for applying cap and also for a better hold or grip for removing.

"L" DIMENSION - Vertical distance from sealing surface to top part of neck bead, i.e., where uppermost part of bead intersects container neck.

LACQUER - A liquid coating used in the manufacturing of closures that dries through evaporation in the baking operation.

LINER - A material inserted inside the cap to form the seal and prevent evaporation or leakage of container contents.

LINER BACKING - The special material usually bonded to paper or foil that forms the cushion for sealing the enclosed product.

LINER DISC - The blanked circular liner from the appropriate liner material, either paper, plastic or rubber.

LINERLESS CLOSURE - A closure, usually plastic, that contains no liner.

LUG CAP - A closure with raised internal impressions that intermesh with identical threads on the finish of a container.

"METAL" - Term commonly applied to steel or aluminum strip stock material.

MOLD - A preshaped cavity in which material is shaped by pressure, heat or some other process.

MOLDING (COMPRESSION) - A process of shaping or forming material in molds with heat and pressure.

MOLDING (INJECTION) - A method of forming plastic objects from granular or powdered plastics by fusing the plastic in a chamber with heat and pressure and then forcing part of the mass into a cooler chamber where it solidifies. This method is commonly used to form objects from thermoplastics.

MOUTH - The open end of the cap opposite the top.

NECK - The part of a container where the shoulder cross-section area decreases to form the finish.

NONTHREADED - Designates those items that do not require threading action when applied to glass or plastic containers such as snap caps, sifter fitments, pourout fitments, etc.

"O.D" - Abbreviation for Outside Diameter.

OVERSEAL - An additional closure that tamper-proofs the primary closure, usually of foil, aluminum or plastic.

PHENOL-FORMALDEHYDE - A phenolic resin compound used to manufacture thermosetting molded closures.

PIPETTE - The glass or plastic tube portion of a medicinal dropper closure.

PLASTISOL - A liquid mixture of resins and plasticizers that is solidified with the application of heat.

POLYETHYLENE - A synthetic made from polymerized ethylene gas under pressure.

POLYETHYLENE PLUG - A fitment used for closing or narrowing the opening in the finish of a container.

POLYETHYLENE SLEEVE - A fitment used in conjunction with a glass stopper.

POLYETHYLENE SNAP CAP - A polyethylene plastic cap designed to hold securely to a particular glass container finish that can be released with a snap of the finger.

POLYPROPYLENE - A synthetic made from polymerized propylene gas.

POLYSTYRENE - A thermoplastic material synthesized from benzene.

POUROUT FITMENT - A plastic component of a glass or metal package, designed to improve the dispensing action of liquid products. Snaps over glass bead or inside can neck, with screw cap applied over the fitment.

"S" DIMENSION - Locates the position of the bottle thread with respect to the sealing surface. It is the vertical distance from the sealing surface to the intersection of the finish wall and the top part of the first part of the bottle thread where full depth contour exists.

SEALING SURFACE - The portion of the finish that makes contact with the sealing gasket or liner and forms a seal.

SHELL - A hat-shaped and preliminary form of closure prior to being threaded and knurled.

SIFTER FITMENT - A plastic component of a package designed to allow shaking out of dry products, as with table salt shaker. Snaps over glass bead, with metal or plastic cap applied over the fitment.

SIDEWALL OF CLOSURE - That portion of the closure between the rolled edge and top of the closure skirt.

SKIRT OF CAP - The vertical part of a closure below the shoulder.

SPOT CROWN - A cork-lined crown cap having a smaller disc of aluminum foil or plastic film, centrally located on the cork liner.

SPOUT CAP - A closure designed to facilitate pouring the contents of the container.

STACKER CAP - A closure designed specifically to nest with the bottom plate of a container to facilitate the stacking of filled containers on top of each other.

STOPPER - A solid glass, cork-shaped, ground-to-fit plug used to seal some bottles.

"T" DIMENSION - The outside diameter of the thread helix on a bottle finish.

TACSEAL - A form of liner usually of glassine that is applied over and bonded to a waxed under-liner. When cap is removed from glass, this Tacseal liner adheres to the glass lip as a security type liner.

THREAD - The intended curved formed section of the cap on the skirt that engages and matches the thread of the glass for screw-fit purposes.

THREAD CONTACT - The actual physical contact that the thread of the cap makes when it engages the bottle thread finish.

TOP - The top panel of the shell opposite the open or flange end.

TOP SEAL - A closure where the sealing surface is located on the container finish.

TOLERANCE - A specified allowance for deviations from standard dimensions or specifications.

TORQUE - The amount of circular force applied to a container to seal or open it.

UREA-FORMALDEHYDE - A thermosetting compound used to fabricate light-colored plastic closures.

VALVE CAP - A closure that includes a valve to regulate the flow of the product from the container.

VINYL - A resin compound usually applied to white paper used in the manufacturing of liners. May also be used in coatings on the metal.

WIRE - Curled edge of closure also referred to as "curl" or "rolled edge".