



## GlueBoss Technical Bulletin 104

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### Technical Data Sheet 104: Shelf Life of GlueBoss acrylic adhesives

The question always is asked: What is the Shelf Life of GlueBoss acrylic adhesives?

The real answer is "It Depends." The primary variable in determining shelf life of the adhesive is the storage temperature of the adhesive. The activator side (small tube, often termed the catalyst), has an organic peroxide in its formulation, which gets the adhesive reacting, that is, getting hard. Organic peroxides are known to have, what is called, a half- life, which in layman's terms means the time (at a particular storage temperature), the catalyst (i.e. the organic peroxide) will have half of its normal activity. So, the shelf life really depends upon the storage temperature of the adhesive. Here are some general guidelines:

1. GlueBoss acrylic adhesives stored at room temperature 70F (21C) to 75F (24C) will have a shelf life of approximately 18 months.
2. GlueBoss acrylic adhesives stored at cooler temperatures, such as 50F (10C) or below have been known to last for years, maybe 3 to 4 years or longer.
3. GlueBoss acrylic adhesives stored at higher temperatures will shorten the shelf life. Temperatures in excess of 90F (32C) are known to shorten the shelf life to less than a year.
4. GlueBoss acrylic adhesives stored at 100F (38C) or higher (for those customers in Arizona/Texas and warmer climates) might only have 6 to 9 months of shelf life, as the half-life of the catalyst can be reduced much quicker at these storage temperatures. Additionally, customers or distributors might experience a higher incidence of gelled tubes (tubes in which the RESIN side is already gelled or hardened, particularly in darker colors, as the pigmentation systems may create excessive reactivity, especially in hotter climates).

So, can GlueBoss acrylic adhesives be frozen? Extensive testing has revealed that there is no problem shipping or storing GlueBoss acrylic adhesives in cold or freezing conditions, PROVIDED, that the adhesives are returned to room temperature before use. Attempting to use the adhesive in freezing conditions may cause a gun malfunction as the activator side will be very thick, if not solid. You may break your gun squeezing the trigger, particularly the plastic guns. Dispensing adhesive in cooler temperatures (below 60F), or on a cold sheet will produce longer gel times, and potentially incomplete cures. Fabrication of sheets should occur with sheet temperatures above 60F with the best success with sheet temperatures in the 70's F.