

This bulletin discusses the useful life of certain manufactured solder alloys.

Scope - This bulletin applies to the most popular SnPb and Pb-free electronics solder alloys including 63/37, SAC405, SAC305 and all the SACX alloys. It specifically covers these alloys sold as bars, chunks, ingots or solid wire

Alloy Shelf Life – Indefinite, provided that proper storage methods and conditions are observed.

Factors Influencing Each Alloys Useful Life - Even when subject to the best processing, handling, transportation and storage methods most electronics solder alloys will form a small, mostly invisible, level of surface oxidation prior to use. This oxidation generally protects against further oxidation unless handling or storage conditions become proportionally worse. “Worse” conditions are generally viewed as when the alloy is subject to higher temperatures, higher humidity / moisture, high or low pH gases or storage in close proximity to strong oxidizing agents.

Surface oxidation is separated as dross when the solder alloy is introduced and melted in a solder pot.