

Silver-Line Plastics

8801 SW Neal Boulevard
Lawton, OK 73505
580-536-5699
Fax 536-4759

900 Riverside Drive
Asheville, NC 28804
828-252-8755
Fax 285-8901

3206 Enterprise Road
Ft. Pierce, FL 34982
772-465-9465
Fax 465-9375

PVC & Compressed Air

PVC pipe is NOT an adequate material to use for conveying or storing compressed air or other gases. PVC can rupture and shatter explosively when subjected to high-pressure compressed air, and the resulting sharp pieces of shrapnel produced may result in severe injury or damage. The resources provided below supports our position.



[Plastic Pipe Institute, Recommendation B – Thermoplastic Piping for the Transport of Compressed Air](#)
([Link to full text](#))

“The Plastics Pipe Institute recommends that thermoplastics piping intended for the transport of compressed air or other compressed gases should be installed by burial, encasement in shatter resistant material, or other appropriate means, to prevent or minimize the possibility of mechanical damage.

Thermoplastic piping that fails from mechanical impact by shattering or whipping can be hazardous to personnel. The potential safety hazard posed by failure must take into consideration the nature of the material, internal pressure, pipe size, and the nature of the gas.

Aboveground installations of thermoplastic piping should be installed per the manufacturer’s recommendations using only products that are recommended by the manufacturer for the particular intended service. Some thermoplastic pipe materials have limited resistance to shatter-type failures from mechanical impact. Suddenly released compressed gas can propel pipe shards or fragments. Materials that can fail by shattering pose a hazard to employees if they are installed above ground without encasement or other protection.”

It is also an OSHA violation to use PVC for compressed air distribution. ([Link to full text](#))

“Since PVC material does not possess shatter resistant property, and since it is very clear from the industry's recognized practice that PVC pipes are prohibited for above ground transportation of compressed air and gases (unless the pipelines are encased in shatter resistant material), any such use by the employers, where employees may be exposed to hazards, will be in violation of Section 5(a)(1) of the OSH Act. ...”