

PAINTING POLYETHYLENE STORAGE TANKS

There are three ways to change the color of polyethylene tanks: inserting color pigments directly into the mold with raw resin, using a compounded resin that is produced in a controlled environment by a resin manufacturer, or by painting the exterior. There are some instances where the first two options won't work and it becomes necessary to paint the tank after manufacturing such as:

- Protecting the storage tank from the effects of UV degradation over a period of years
- Matching existing equipment or architecture in the surrounding area
- Applying a company logo or sign
- Applying gallonage markers and/or liquid level increments

Poly Processing recommends painting tanks on-site to allow the surface to oxidize a bit and protect it from potential scratches during transportation and installation. We've put together this guide to help you prepare and successfully paint your polyethylene storage tank,

Paint/Materials

The best paint to use for coating polyethylene is an exterior latex house paint or an elastomeric paint that maintains its flexibility even when dry.

This will allow the tank to expand and contract without chipping or tearing the paint. There are many brands of exterior house paint on the market today that will suffice for painting your Poly Processing tank. When ordering from your paint supplier, ask them for a good quality exterior latex house paint either in flat or semi-gloss or an elastomeric paint. Just make sure the brand you purchase remains somewhat flexible when dry.



Surface Preparation

New tanks require surface preparation in order for the paint to adhere correctly. New tanks have a glossy appearance to them. Before painting the tank, the glossy surface needs to be removed so there is a dull surface left for the paint to adhere to. There are two ways to prepare a new tank for painting. One way is to lightly sand blast the outside surface or hand sand the outside surface to remove the waxy, glossy surface. Be careful when sand blasting the outside of the tank. It takes very little pressure from a sand blaster to remove the glossy surface.

A second way to prepare the tank is to flame treat it. This is accomplished by using a handheld portable propane torch or open flamed gun and gently guide the flame along the outside surface to remove the glossy appearance. Note: Tanks that have been outdoors for over a year will probably already have most of the glossy appearance removed. If there are spots on the tank that have not achieved the dullness needed, simply treat them with one of the two surface preparation procedures described above.

Application

Painting a polyethylene tank is similar to painting the outside of a home or business. The idea is to achieve a good bond to the surface that you are painting as well as apply as many thin coats as economically practical. Polyethylene tanks by nature need to be painted at a slower rate than most “standard” surfaces because of the surface tension characteristics of the polymer as well as the waxy surface features. Paint can be applied in the traditional ways using airless sprayers, power sprayers, rollers, or even brushes. It is very important that you consult a painting professional or paint supply professional when defining the method that you will use to paint the polyethylene tank. This is due to the change in specific paint characteristics for each application method.

Other Considerations

Poly Processing Company has had good success painting tanks using the techniques outlined above. Poly Processing Company in no way purports to be painting and coating experts. We are using historical information as well as best practices for painting polyethylene to provide this information to you. We always recommend that you consult a coatings or painting professional in your area for the most up to date techniques and materials available.

Have more questions about painting your poly tank? Give us a call at **866-765-9957** or email sales@polyprocessing.com