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	Painting Polyethylene Tanks	Date: May 10, 2001 Rev: A

Painting Polyethylene Storage Tanks

Many end users of Poly Processing Company's storage tanks have a need for their tanks to be painted. There are several reasons that an user might want to paint a polyethylene tank. These include:

- ◆ Protect the storage tank from the effects of UV degradation over a period of years.
- ◆ Match existing equipment or architecture in the surrounding area.
- ◆ Apply a company logo or sign.
- ◆ Apply gallonage markers and/or liquid level increments

There are three main ingredients for successfully painting a polyethylene storage tank. These ingredients like any other good painting process include the selection of proper paint / materials, good surface preparation / surface profile, and proper application.

Paint / Materials:

The best paint to use for coating polyethylene is an exterior acrylic 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 acrylic 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 acrylic 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 of Plastic Tanks:

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. Take care to keep the flame moving and not hold it in one spot. Localized heat on the outside of a plastic tank can be catastrophic.

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

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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.

Poly Processing Company has had good success painting tanks using the techniques outlines 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.