

What's inside the box?

Importance of specifying the correct resin grade by Mary Hyde

In today's volatile economy, it seems that everyone is looking for the "cheaper" product. Whether one is talking about the retail or industrial sector, products are morphing into a modified and sometimes dangerous version of the original.

It was not long ago that we experienced a crisis with pet food products. Many beloved pets were killed by companies who decided to go the "cheaper route" using inexpensive ingredients in an attempt to lower costs and boost margins. Using these cheaper ingredients in pet food proved deadly.

Currently one well-known retailer is recalling children's toys and jewelry produced by companies using substandard materials that could result in illness or even death. The problem is that these inferior products look and feel the same as those made from quality materials.

Difference in plastic resin grades affect an application

With plastics, the story is the same. As resin prices increase and economic conditions continue to worsen, the plastics we have known for years are disappearing and cheap imitations are attempting to take their place. However, the differences in plastics are not that obvious until used in an application.

Tensile strength, chemical resistance and temperature resistance are just a few of the key values one must look at when

determining the type of plastic suitable for a particular application. In many materials, not only are we seeing an influx of reprocessed materials with lower performance values, there is also a wide assortment of resin grades that go by the same name. But in each of these different grades of resin, there are extreme differences in physical performance values. These differences can cause a product to fail in an application where one may have been advised that the product was suitable.

Specifying the wrong resin grade for an application presents two significant problems:

- One grade of a plastic material may be suitable for an application but not all grades.
- They all look alike!

As a distributor, it is important to understand the products being produced by your supplier. Ask for product information and guidance when selecting a material. If the product data received does not match the product data required, you may need to find another supplier that uses a higher performance grade of the resins selected, or possibly go with a different plastic material all together.

Key questions for distributors

Be sure to ask your customer particular questions so that you will have the information to forward to your supplier.

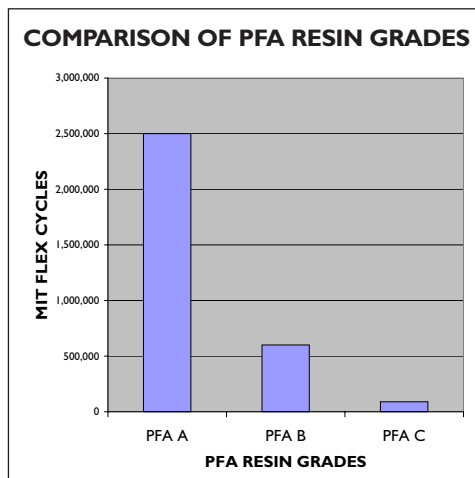
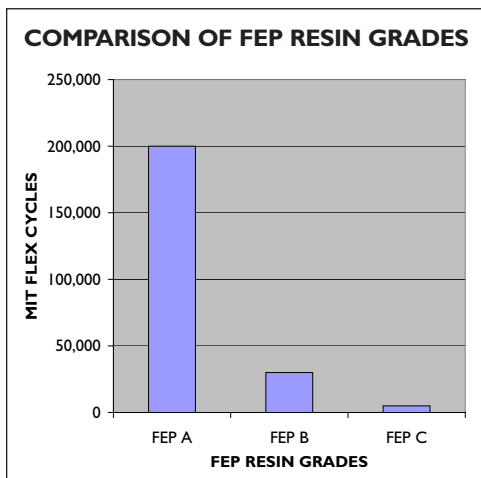


Altaflo LLC manufactures FEP tubing using 100 percent virgin grade high performance resin to provide the best physical properties for your application.

These six key questions should include:

1. What chemicals are being used in the application?
2. What temperature is being used? (High and low is important.)
 - Is there temperature fluctuation?
3. Does your application involve fluid handling?
 - Identify pressure (constant and highest)
 - Identify vacuum
4. Does your application involve movement? Cycles?
5. Has your customer advised specifications that these products must meet?
6. Are there any additional areas of concern or application parameters that must be met?
 - Permeability
 - UV resistance/transmittance
 - Surface finish
 - Absorption
 - Ability to bond (heat and chemical)
 - Purity
 - Special tolerances
 - Lengths/sheet size

By asking the right questions, we can reduce the possibility of product failure in the field. Working together as IAPD members, we can ensure that the products we sell will be the products that get the job done — **safely.** ■



Special Note: Values shown are based on use of 100 percent virgin grade resins. Products made from reprocessed resin or a combination of virgin and reprocessed resins will have significantly lower values than shown.

Mary Hyde is co-owner of Altaflo LLC. For more information, contact Altaflo LLC, 25 Weldon Road Lake Hopatcong, NJ 07849 USA; (973) 663-3303, fax (973) 663-3323, e-mail: sales@altaflo.com, www.altaflo.com.