Article Side
The varied uses of Epoxy Resins by Royceintl

Article published on May 29th 2012 | Business

Wikipedia defines epoxy resins as â€œEpoxy is a copolymer; that is, it is formed from two different chemicals. These are referred to as "resin" or "compound" and the "hardener" or "activator.â€• The resin consists of monomers or short chain polymers with an epoxide group at either end.â€• One of the first attempts to make resins from the compound Epicholorohydrin was made in the 1920â€™s in the United States. These resins today are a multi billion industry in the United States and have a variety of uses that can either be commercial and industrial.

In the section below, we have discussed some of the applications and versatile uses of epoxy resins â€“

1. The adhesive industry uses epoxy based resins for the process of curing, which alters the chemical properties. These properties make these resins appropriate for coating and adhesive purposes. These resins form a thin protective layer around the object offering it excellent hardness. Used in industrial and automobile industry, they help to provide effective results in case of corrosion and its prevention.

2. Their residential applications may include its uses as paints or for color protectors. These resins have their uses in repairing things that are made of porcelain, things made of wood or leather, metal and glass.

3. When it comes to industrial uses, these resins have a wide usage in the cosmetic dentistry industry, communication industry in the form of fibre optics and optoelectronics. The electronics industry uses these resins widely for making insulators, and electricity conductors.

4. In electrical systems and electronics industry, these resins find its uses in motors, bushing, and insulators. Protection is provided to electrical components from external factors as dust or short-circuiting with the help of these resins.

5. One of biggest areas where these resins have their applications is in the marine industry. There are some important reasons due to which they are used in the marine industry. One of these reasons is the better mechanical properties as compared to the polyester resins that for it to be employed widely in the production of marine components. The other reason is their strength, property to fill gaps and adhesion.

6. Epoxy resins also have applications in the aerospace industries where they are mixed with fibre in order to construct structural matrix material.

7. Finally, these highly utilized resins are also used in biology for the sectioning of the samples which are later imaged using an electron microscope.

Article Source:
http://www.articleside.com/business-articles/the-varied-uses-of-epoxy-resins.htm - Article Side

Royceintl - About Author:
a Epoxy resins are highly durable, resistant and versatile, therefore, it is usual to find its usage in several different kinds of industries and applications, visit http://www.royceintl.com to know about the types of resins in details.

Article Keywords:
Epoxy resins, Epoxy resin

You can find more free articles on Article Side. Sign up today and share your knowledge to the community! It is completely FREE!