Epoxy Resins at Different Viscosities by Royceintl

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In the words of Wikipedia, â€œEpoxy, also known as polyepoxide, is a thermosetting polymer formed from the reaction of an epoxide "resin" with polyamine "hardener". Epoxy has a wide range of applications, including fiber-reinforced plastic materials and general purpose adhesives.â€• Epoxy is a copolymer comprised of two different types of chemical. Having an epoxide group at either end, it is also referred to as the â€œhardner.â€• Epoxy resins are generally formed by the polymerization process that is also referred to as curing.

It was quite common for people to use these resins in the older days for their boat making purposes. These resins not only help in forming a powerful waterproof barrier but also helped in increasing the strength when formulated properly. Today, these resins find their uses in different types of industries. Likewise, these resins can have various uses depending on their chemical properties, especially on the viscosity. In the section below, we have discussed the uses of these resins at different viscosity (with the temperature being maintained constant i.e. at 25 degrees). It needs to be understood that these epoxy resins can be formulated depending on the curing and changes in the viscosity.

1. At viscosity of 400cps to 450cps â€“ This cured resin is formed by reaction between Bis-A Epoxy Resin and Polyglycol di-epoxide. This results in the increase of various properties such as flexibility and that of elongation.

2. At viscosity of 900cps to 1100cps â€“ At this viscosity the resin has increased filler loading. It also leads to better electrical and physical properties. These resins find their applications in places where a resin with good solvent resistance is required to provide resistance.

3. At viscosity of 7500cps to 9000cps â€“ This resin has its application in marine world, flooring and I the industry of civil engineering. The low viscosity of this resin makes it ideal for maintenance.

4. At viscosity of 1500cps to 1800cps â€“ This low viscosity resin has it uses in various places such as high solid coatings, tank linings, civil engineering and in decoupage.

5. At viscosity of 4000cps to 6000cps â€“ This is a type of halogen liquid epoxy due to its low viscosity. It is due to this that they are used in various electrical applications.

6. At viscosity of 10000cps to 16000cps â€“ This is in liquid form and is a standard type of epoxy used in laminations, coats and other adhesive applications.

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Royceintl - About Author:
a Epoxy resins are a kind of versatile chemical, which has its uses in variety of fields and application under different viscosities. To know more visit http://www.royceintl.com

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