STL-PDS-NA-Polycup 7535

Polycup™ 7535 polymeric resin

Product Description

Polycup™ 7535 polymeric resin is a water-soluble, polyamide-epichlorohydrin, thermosetting crosslinker that has a high level of secondary amine functionality. It is reactive with epoxides and anionic materials. It can also be used to increase the crosslinking rate of other Polycup resins.

Polycup resins may be used as a crosslinker in adhesives, inks, top-coatings, and other barrier finishes. These resins promote water resistance in polymer systems that are typically water soluble/sensitive. They also impart toughness to formulations and improve adhesion to low surface energy substrates. Polycup resins are effective over a wide pH range of 4-9 with optimum results obtained under mild alkaline conditions.

Product Application

Polycup 7535 is recommended for addition into products that are used in direct food contact applications.

Curing Conditions: Concentration, time, temperature, and system pH affect the degree of cure and rate at which Polycup resins will crosslink.

Ideal cure conditions will occur at pH 7 - 9 and temperature at 100 - 150 °C. For shorter curing times at high temperature, a high-intensity infrared oven is needed for uniform heating. Ordinary convection and air-draft ovens are satisfactory for longer curing times and lower temperatures. However, the level of cure strength may decline as temperature is reduced. Some natural crosslinking will occur at room temperature over a 2 to 3 week period.

Compatibility: Polycup resins are compatible with cationic and most non-ionic materials. Compatibility with strongly anionic materials may be difficult and should be tested prior to use. To avoid ionic shock, Polycup resins should be diluted to 5% solids or less before addition to anionic systems. The pH of Polycup should be adjusted to a target pH (typically, pH 7.5) with an alkali such as aqueous sodium hydroxide or ammonium hydroxide to optimize performance in each specific formulation. Compatibility of Polycup can be improved by addition of sodium sulfate or zinc sulfate at 1-5% based on total formulation weight.

Polycup 7535 is to be used in accordance with control procedures Solenis establishes for a specific application.

Polycup Formulation Examples

Use with epoxide containing materials. Polycup 7535 is useful as an amine-hardener in epoxy resins. The addition of 5-10% will react quickly with epoxy based materials.

Use as an accelerator / performance booster with other Polycup PAE resins. If diluted, and added to a system that contains a standard PAE resin, Polycup 7535 will react quickly and shorten the crosslinking time.

Benefits

- Water-based formulation
- No formaldehyde intentionally added
- Reactive over a wide pH range
- Low viscosity, low odor liquid

Packaging

This product is available in a variety of packaging sizes. Your Solenis representative will recommend the appropriate packaging for the application.

Important Information

Typical Properties: Refer to the Safety Data Sheet (SDS).

Regulatory Information: Refer to the SDS or contact your sales representative for any additional regulatory and environmental information.

Safety: Solenis maintains an SDS for all of its products. Use the health and safety information contained in the SDS to develop appropriate product handling procedures to protect your employees and customers.

Our SDS should be read and understood by all of your supervisory personnel and employees before using Solenis products in your facilities.