

ADVANCED POLYMER COATINGS

deal snapshot

A major player in the Food & Beverage Industry chooses the BPA-Free ChemLINE® Coating System for food storage

Overview

A major U.S.-based consumer packaged goods company needed a coating solution for two conical-bottom storage tanks used to hold tomato paste. Each tank measured 46 feet high by 19 feet wide.

Because the tanks were located in California and used for food storage, the selected coating needed to meet strict regulatory requirements, including FDA compliance and BPA-free status. ChemLINE® 784 was chosen for the project, with the application completed by Process Service Specialists (PSS) of Gonzales, Louisiana.

The Obstacle

As part of the company's standard process, tanks requiring relining were placed on a routine inspection plan to confirm lining integrity. However, selecting a replacement lining presented a specific set of challenges.

Based in California and used for food storage, the tanks had to meet strict state and federal requirements, including FDA approval, BPA-free status, and CONEG compliance. At the same time, the lining needed the chemical resistance required to protect the substrate from the acidic nature of tomato paste.

The Regulations

FFDCA

The overarching piece of legislation covering food contact materials (FCM) in the U.S. is known as the FFDCA, or The Federal Food, Drug, and Cosmetic Act, administered by the Food and Drug Administration (FDA).

Regulations on FCM reside in Title 21 of the Code of Federal Regulations (CFR). At the same time, regulated indirect food additives and polymers live in 21 CFR 175 - specifically CFR Title 21, section 175.300, which refers to regulations on 'Adhesives and components of coatings.

California Prop 65

California Proposition 65 (Prop 65), originally known as the 'Safe Drinking Water and Toxic Enforcement Act of 1986', requires the state to maintain a list of chemicals known to cause cancer, congenital disabilities, and other reproductive harm.

Such substances found in FCM, such as BPA, have been the subject of several settlement agreements. Several places inside the U.S. completely prohibit the use of BPA in certain consumer products: California is one of them, however, not altogether banning it.

CONEG Compliance

In 1992, the Toxics in Packaging Clearinghouse (TPCH) was established by the Coalition of Northeastern Governors (CONEG) to assist states that adopted the CONEG-developed Model Toxics in Packaging Legislation.

Since then, nineteen states have established laws based on the Model Toxics in Packaging Legislation, which was formerly known as 'CONEG'.

These laws prohibit any intentional use of amounts of lead, cadmium, mercury, or hexavalent chromium in packaging or individual packaging components, such as inks, adhesives, dyes, pigments, stabilizers, and adhesives.

The laws require certificates of compliance and allow for certain exemptions which must then be approved by the individual states, in this case being the state of California.





The Decision

As routine inspection showed, the lining in the tanks showed great integrity; however, it didn't possess one of the top regulated qualities, BPA-Free. ChemLINE® 784 was introduced to the customer by an applicator who routinely lines F&B tanks, Process Service Specialists, headquartered in Gonzales, Louisiana. After review from the customer's team of chemists, the coating solution passed all necessary regulatory necessities required to line the storage tanks.

The ChemLINE® 784 coating system is a high functionality, two-component thermoset polymer coating formulated with an unmatched level of chemical resistance.

When the storage tanks need cleaning, ChemLINE® will allow for cleaning at high temperatures. And with the coating material's high gloss low energy surface, the customer will also benefit from minimal absorption from the commodity into the lining, further keeping that commodity of top purity and quality.

It is also worthwhile to note that during the coating application, the customer decided to add another tank suited for the 784 solution - bringing the total number of tanks lined to three.

Customer Benefit

+ BPA-Free / FDA
+ maximum longevity
+ compliant protection
+ chemical resistance

Contact your Advanced Polymer Coatings representative for more information on ChemLINE® coatings for your storage needs.