

# EPOXY COATINGS USED IN CONTACT WITH FOOD



In the coatings industry, there are a number of applications where the coating needs to comply with regulations for safe use regarding contact with food. Depending upon the specific application, the requirements of the Food and Drug Administration (FDA) may be applicable.

Epoxy coatings are widely used for applications requiring contact with food. The regulations regarding the required testing and the approval process for epoxy coatings under each of these areas are different. The purpose of this bulletin is to:

- Provide general information on the FDA;
- List the Dura-Coat epoxy coatings that can be used in compliance with the current FDA requirements (e.g., 21 CFR 175.105 and 21 CFR 175.300).

## FDA COMPLIANCE

There are two main types of epoxy applications in the food industry which may be subject to the FDA regulations as reported in the Code of Federal Regulations (CFR), Title 21 requirements:

- Resinous and polymeric coatings (21 CFR 175.300), and
- Adhesives (21 CFR 175.105).

Because resinous and polymeric coatings are extremely complex materials and are often crosslinked and of no clearly defined chemical composition, Section 175.300 lists materials which may be used in the manufacture of polymeric coatings intended for use in direct contact with food applications. Similarly, Section 175.105 lists substances that may be used to prepare adhesives. Formulators should keep in mind, however, that it is the finished, formulated system that must comply with these FDA regulations, including the end use and extractive limitations.

An epoxy system that meets the requirements set forth in these regulations is said to be “used in accordance with,” or “used in compliance with CFR Title 21, Part 175.300 or 175.105.” It is not said to be “FDA approved,” because the FDA does not “approve” specific company’s formulated systems. The responsibility of determining a specific epoxy system’s (finished, cured product) compliance is carried out by the system’s manufacturer. The manufacturer should refer to the FDA’s food additive regulations, which are published in Title 21 of the Code of Federal regulations. For more information about 21 CFR, please go to: <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcr/cfrsearch.cfm>. For information about the US Government Printing Office, who publishes the CFR, please call 202.512.1800 or go to: <https://www.gpo.gov/contact.htm> for contact information.

## FOLLOWING THE LIST OF EPOXY COATINGS IN COMPLIANCE WITH FDA 21 CFR 175.300 AND FDA 21 CFR 175.105

- Dura-Coat Metal 400
- Dura-Coat Rebuild 101
- Dura-Coat Rebuild Fast 151
- Dura-Coat Rebuild Chemical 201
- Dura-Coat Rebuild Chemical Fast 251
- Dura-Coat High Temp Putty 1800
- Dura-Coat Low Surface Energy 290
- Dura-Coat Chemical 200
- Dura-Coat Chemical 200HT
- Dura-Coat Krete-Chemical 870

