



worldwide innovator in flexible liquid packaging

FOR IMMEDIATE RELEASE

CDF's Bag-in-Box receives UN Certification for 20 Liter Bag-In-Box Packaging

Plymouth, MA February 17, 2016 - CDF Corporation, a leading manufacturer of [drum](#), [pail](#), [intermediate bulk container](#) and [bag in box liners](#) and [flexible packaging](#), has successfully passed the design qualification testing of a combination package; fiberboard box with a plastic bag. CDF's UN certified bag-in-box will provide the highest levels of protection for transporting hazardous products requiring class II and III packaging.

The [20 liter bag-in-box](#) packaging endured four rigorous performance tests executed by Ten-E Packaging Services; the tests include drop, stacking, vibration and cobb water absorption. Prior to testing, the packages were prepared exactly as they would be for transportation and in accordance to UN testing guidelines. TEN-E used an alternate solution in place of the hazardous material, as allowed by the UN testing regulations.

"Our development team did a tremendous job creating a product that meets the rigorous UN standards while offering unique value to our customers. We are excited to continue our growth into the UN package market segment," said Jay Waltz, CDF Vice President of Sales & Marketing.

For the box drop tests, each package was dropped from 47.2". The first drop was flat on the bottom, the second drop was flat on the top, the third drop was flat on the long side, the fourth drop was flat on the short side and the fifth drop was on a corner. Any breakage or leaking during the tests void the package. One prepared package was dropped for each test. CDF's bag-in-box package passed the drop tests at 1.2m.

The stacking test is performed to ensure the packages are strong enough that they will not collapse. For the stacking tests, two filled packages of the same type are placed on the test sample. The stacked packages must maintain their position for one hour. CDF's [bag-in-box package](#) passed the stacking test at 303.9Kg - 24 hours.

The vibration tests are done to simulate the package traveling by motorized vehicle. For this test, the packages are placed upright on a vibration platform. The packages are constrained horizontally to prevent falling off the table, but can move vertically to bounce and rotate. Immediately following the period of vibration, each package is removed from the platform, turned on its side and observed for evidence of leakage. CDF's bag-in-box package passed the vibration test at 4.1Hz - 1 hour.

The cobb water absorption test is performed on the fiberboard outer package to test the quantity of water that can be absorbed by the surface of paper or board in a given time. This is to ensure the paper used is of high enough quality and that it will not disintegrate with moisture. CDF's box passed the cobb water absorption test at 30 minutes.

About CDF Corporation

[CDF](#) Corporation is a privately held international company that specializes in the manufacture and sale of high quality pail, drum, intermediate bulk container and bag in box liners and flexible packaging. CDF manufactures products ranging in sizes from 2 ounces to 330 gallons in its Plymouth, Massachusetts ISO certified facility. Our unique products satisfy a variety of markets and applications including the food and beverage, chemical and cosmetic industries. www.cdf1.com

About TEN-E Packaging Services

TEN-E Packaging Services was founded in 1989 and became the first Approval Agency for the United States Department of Transportation to test and certify packaging for dangerous goods regulations. www.ten-e.com

Contact:

Amanda Verash-Morris, Marketing Communication Manager

CDF Corporation

800-443-1920

averash@cdf1.com

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