(h) Record retention. Following each design qualification test and each periodic retest on a Flexible Bulk Container, a test report must be prepared. The test report must be maintained at each location where the Flexible Bulk Container is manufactured and each location where the design qualification tests are conducted, for as long as the Flexible Bulk Container is produced and for at least two years thereafter, and at each location where the periodic retests are conducted until such tests are successfully performed again and a new test report produced. In addition, a copy of the test report must be maintained by a person certifying compliance with this part. The test report, at a minimum, must contain the following information:

1. Name and address of test facility;
2. Name and address of applicant (where appropriate);
3. A unique test report identification;
4. Date of the test report;
5. Manufacturer of the packaging;
6. Description of the flexible bulk container design type (e.g., dimensions, materials, closures, thickness, etc.), including methods of manufacture (e.g., blow molding) and which may include drawing(s) and/or photograph(s);
7. Maximum capacity;
8. Characteristics of test contents (e.g., particle size for solids);
9. Mathematical calculations performed to conduct and document testing (e.g., drop height, test capacity, outage requirements, etc.);
10. Test descriptions and results; and
11. Signature with the name and title of signatory.

§ 178.1045 Drop test.

(a) General. The drop test must be conducted for the qualification of all Flexible Bulk Container design types and performed periodically as specified in §178.1035(e) of this subpart.

(b) Special preparation for the drop test. Flexible Bulk Containers must be filled to their maximum permissible gross mass.

(c) Test method. (1) A sample of all Flexible Bulk Container design types must be dropped onto a rigid, non-resilient, smooth, flat and horizontal surface. This test surface must be large enough to be immovable during testing and sufficiently large enough to ensure that the test Flexible Bulk Container falls entirely upon the surface. The test surface must be kept free from local defects capable of influencing the test results.

(2) Following the drop, the Flexible Bulk Container must be restored to the upright position for observation.

(d) Drop height. (1) For all Flexible Bulk Containers, drop heights are specified as follows: Packing group III: 0.8 m (2.6 feet)

(2) Drop tests are to be performed with the solid to be transported or with a non-hazardous material having essentially the same physical characteristics.

(e) Criteria for passing the test. For all Flexible Bulk Container design types there may be no loss of the filling substance. However a slight discharge (e.g., from closures or stitch holes) upon impact is not considered a failure of the Flexible Bulk Container provided that no further leakage occurs after the container has been restored to the upright position.