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Test of leak tightness and bursting pressure

1. Purpose

The test serves the determination of the resistance of closed packages against spillout of liquid and gaseous media in order to evaluate the suitability of packaging for certain application purposes. The result of the bursting pressure test can be used as an indicator of e.g. seam quality.

2. Terms

Nominal volume: volume used for nominal description of packaging.

3. Test devices

Valve that is suitable to apply any optional overpressure of water and to increase this at a predetermined rate.

4. Procedure

4.1 Static leakage test:

- The test sample is filled at room temperature with low surface tension water up to nominal volume and closed ready for dispatch with the original accessories. In the case of open head drums, the clamp ring is to be placed with the clamp lever at the seam
- The sample is tested, without conditioning, lying for 1 hour with the clamp lever at the seam and so that the clamp ring has no point of contact.
- Evaluation: no water must spill out during this time.

4.2 Hydraulic bursting pressure test

- The test sample is filled completely with water and connected to hydraulic pressure.
- The interior hydraulic pressure is smoothly increased at a rate of approx. 100 kPa/min up to breakage (burst) of the test sample

5. Test report

With reference to these test and specification guidelines, the following is to be stated in the test report:

- Type and number of test samples (e.g. packaging type, packaging number, date of manufacture, tool, form, etc.)
- Individual results: bursting pressure values and description of type and reason, with all observations that can be of importance for the evaluation.
- Date of test, place of test, name of tester