Declaration of Safety

Hereby OneCircle confirms that the following products:

- KeyKeg
- UniKeg

have been tested extensively on the following safety aspects:

First article tests

All kegs have gone through an extensive test program during development to evaluate their safety. The test program included burst pressure test, pressure endurance tests at elevated temperatures, stress cracking simulation tests, impact tests and drop tests.

In line pressure test

Each produced keg is subjected to an in-line pneumatic pressure test. During this test the keg is briefly exposed to a pressure of 7 bar / 102 psi. If a defect is present within the pressurized container, the keg will be rejected.

Quality control

During assembly, each keg passes an automated Quality Assurance Station. At this station each keg is checked for a number of quality parameters and is rejected when it's non-conforming.

Besides this, random kegs are sampled from the production line to undergo a series of tests to determine if the kegs are fit for release. These tests are meant to check the strength and therefore, indirectly, the safety of the kegs. The tests are based on the guidelines in the German DIN 6647-4 standard issued November 2011, as well as the performance guidelines for single use kegs issued by the US Brewers Association and the BFBI.

The following tests are done:

1. Drop test: the keg is dropped three times from a height of 1.2 metres, held at an angle of 0°, 45° and 90°. The integrity of the keg may not be compromised after the test and it must still be possible to dispense from it.
2. Burst pressure test: the keg is subjected to a hydraulic pressure of 11 bar / 159 psi which is maintained for 60 seconds. The keg should be able to withstand this pressure without bursting. Deformation is inevitable and in this case allowed. Bursting is only allowed at 12 bar / 174 psi or higher.
3. Pressure endurance test: this test is designed to simulate and inquire the long-time pressure resistance of the keg at elevated temperatures as they occur during storage or transport under tropical conditions. The keg should be able to resist 6 bar / 87 psi at 40 °C / 104 °F for at least 24 hours without leaking, bursting or substantial deformations.

Correct usage

For both KeyKeg and UniKeg the maximum dispense pressure is 4.1 bar / 60 psi. The KeyKeg is designed to work with its own unique dispense coupler which has a safety relief valve which will engage at 4.1 ± 0.2 bar / 60 ± 3 psi. It is therefore not possible to use the KeyKeg at a higher dispense pressure, unlike the UniKeg.

There are a couple of things to remember when working with KeyKeg and UniKeg:

1. Read the instructions on the keg carefully.
2. The carbonation level of content should be ≤ 7 g/ltr.
3. Always fully engage the lever of the dispense coupler.
4. Keep the keg cool and protect it against direct sunlight and other heat sources.
5. Never use a sharp object to puncture the keg.
6. Be careful not to spill chemicals such as aggressive or corrosive cleaning agents on the PET.
7. Kegs must be depressurized when emptied

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