

How are Aerosols tested to ensure that they are safe?

The Aerosol Dispensers Directive (ADD) prescribes how to test aerosols.

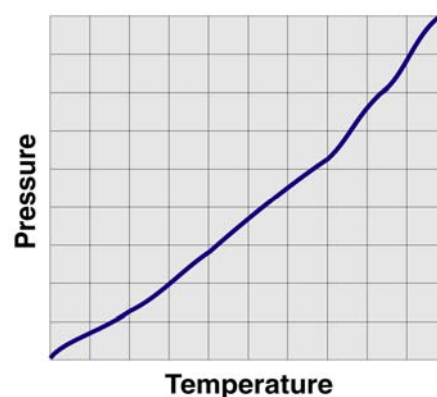
Testing of Empty Cans

- A hydraulic press test is carried out on empty cans to check for leakage or bursting
- Cans must withstand “Test Pressure” for 25 seconds, without any permanent distortion

Testing of Filled Cans

Hot Waterbath Testing

- Propellant pressure increases with temperature
- The waterbath is designed to increase the internal pressure to stress test the can and crimped valve at around 50° C
- Any weakness will be apparent by the can leaking or bursting
- Cans must withstand 50% higher pressure at 50°C



Why Waterbath?

- Potential exploding/leaking cans are removed from circulation
- Every filled container checked to ensure compliance with consumer safety and transport legislation

What is the alternative to the Waterbath?

Method approved - QA system

- Canmakers – all cans stable and leak tight
- Valve makers – all valve components in place
- Fillers – handing and filling checks

Testing requirements

- All empty cans pressure tested - 3.3×10^{-2} mbar.l.s⁻¹
- All filled aerosol micro leak tested – 2.0×10^{-3} mbar.l.s⁻¹
- All filled aerosols in-line check weighed.

Third Party Verified and Department for Transport (DfT) authorisation also required

The UK aerosol industry takes the safety of its products very seriously and has tests in place to ensure that faulty products are removed during the manufacturing process

If you have an aerosol related question call us on tel: +44 (0) 207 828 5111
or email: enquiries@bama.co.uk

BRITISH AEROSOL MANUFACTURERS' ASSOCIATION
www.bama.co.uk