

# SOLO™ Aerosol - The most thoroughly researched Smoke Test Aerosol.

Testing using aerosols dispensed from pressurised canisters is now widely accepted as the most popular means of achieving the test for function of a smoke detector.

As aerosol usage increases, so do the number of providers. Users must be aware that to manufacture a product which will activate a smoke detector is not difficult. However, it is considerably more challenging to manufacture a product which is suitable for all makes

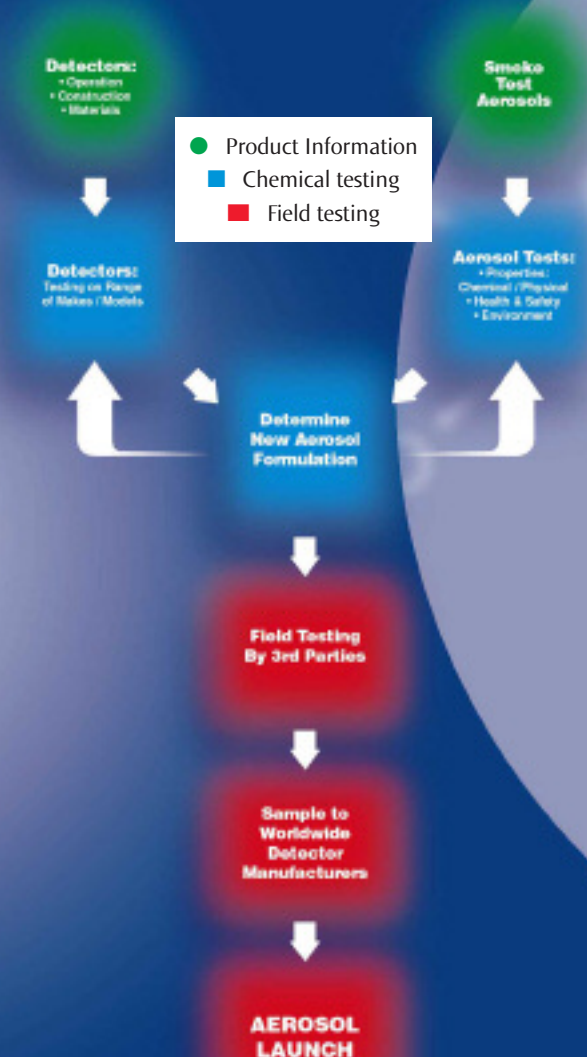
and models of detector, whilst not harming the detector, its components, the user or the environment.

Too many test aerosols in today's fire protection market have not been fully researched and, as a result, can cause problems such as *stress-cracking* in detectors, other damage to components, harm to the environment in which the detector is installed or even respiratory or other health problems to the user. Some may even pose a fire risk!

**Solo Aerosol has been subjected to the most in-depth plastic compatibility and performance research and testing in the history of this type of product**

Experts recommend the use of a smoke dispenser for the release of aerosol (the design of the aerosol being optimised for this function). Particle size and dissipation is the key to efficient activation of detectors, whilst ensuring detectors are not soiled by excessive aerosol application.

Selection of the correct chemicals for use within these products is of paramount importance since there is a need to combine the often conflicting requirements of performance, environmental regulations, non-flammability, low cost and, most importantly, compatibility with the components from which the detectors are manufactured.



Features	Solo Aerosol
Endorsed by detector manufacturers	✓
Detector materials compatibility tests carried out	✓
Oil free formulation	✓
Fast activation of detectors	✓
Fast clearing time	✓
Minimal residue with correct use	✓
Suits conventional & intelligent systems	✓
Suits optical and ionisation type detectors	✓
Suits most makes & models of detector	✓
Developed in conjunction with detector manufacturers	✓
Non toxic	✓
Harmless to respiratory system with correct use	✓
Overall low cost per test	✓
Compatible with Solo test equipment	✓
Non Flammable	✓
CFC Free	✓

The Solo Aerosol is the result of an extensive two year research programme to produce the best, most efficient and safest smoke aerosol. The project, within the government Teaching Company Scheme (TCS), brought together the test and service equipment skills of No Climb with the chemistry and particulate behaviour skills of a major London university.

An aerosol development scientist, based at No Climb, undertook research into aerosol products and detection devices, concentrating on:

- particle size, characteristic and behaviour
- residue
- toxicity of product
- device response / clearing times
- detector and component compatibility
- spray pattern

Chemicals used in detector test equipment need to be compatible with the plastics from which detectors are manufactured. This project included the most in-depth plastic / chemical compatibility tests ever conducted in this field and proved Solo aerosol to be chemically safe. It also uncovered worrying deficiencies in currently available alternatives.

*The result is **SOLO** Aerosol -  
The Definitive Smoke Testing Aerosol*



## Features / Benefits

Solo Aerosol has been proven to contain the properties vital to today's fire protection market

- No damage to detector plastics / components\*
- Faster response times to alarm
- Faster clearing and detector re-set times
- Minimum residue
- Designed for use with Solo 330 Smoke Dispenser
- Non-flammable formulation
- Minimum impact to health, safety and environment
- Improved value for the customer

Long term testing, carried out on aerosols by No Climb, has optimised the response rate for smoke detectors, as well the clearing time, reducing the time required for testing.

\* NB. Statement based on those detector plastics and components included within the development project and current at that time

