



ActivFire[®] Advisory Note AN-006

Testing and certification of fire suppression systems for mobile and transportable equipment

This advisory note provides an explanation and timeline for the pathway for the evaluation of conformity and certification of vehicular fire suppression systems to AS 5062:2022 by CSIRO's Fire Systems Laboratory and ActivFire[®] Scheme.

Background

AS 5062:2022 was published in November 2022 and supersedes AS 5062:2016. This new revision includes several significant changes including new test requirements for the fire extinguishing performance (Appendix E) and mechanical components (Appendix D). CSIRO Technical Specification TS-014 details the available evaluation pathways for vehicular fire suppression systems previously tested to AS 5062:2016. TS-014 will also provide information on how systems previously evaluated and certified to, UL 1254, FM 2970, and SP Method 4912 may be evaluated and certified to AS 5062:2022.

Changes to AS 5062

The preface of AS 5062:2022 describes the changes to the standard as follows:

1. *An increased emphasis on fire prevention.*
2. *Addition of new test requirements to prove repeatability of fire extinguishing performance within Appendix E of AS 5062:2022.*
3. *Inclusion of table to define fire testing requirements for different types of fire systems.*
4. *Inclusion of summary information on the common types of fire extinguishing agents used in mobile and transportable equipment, see Appendix A of AS 5062:2022.*
5. *Addition of new requirement of listing of detection devices.*
6. *Addition of surface temperature and fuel ignition temperature assessment.*

In addition to the changes described above, it is emphasized that the following changes in AS 5062:2022 impact upon the evaluation of the product:

1. *The test procedures and criteria for acceptance of Test No.1 in Appendix D of AS 5062:2022 have been updated and are required to be conducted prior to the fire tests in Appendix E of AS 5062:2022.*
2. *The test procedures and criteria for acceptance of Test No.21 in Appendix D of AS 5062:2022 have been revised to clarify that the tests are to be conducted at minimum and maximum operating temperature.*
3. *The test method for foam water spray fire suppression systems in Appendix E explicitly only allows for the spray pattern to fall within the tray and not overspray the main tray during the Direct Application test.*



4. *Test No. 22 in Appendix D has been added to verify that the fluorine content of the liquid extinguishing agents. Liquid extinguishing agents claiming to be fluorine-free must be demonstrated to contain levels of fluorinated organics not exceeding 1 mg/kg (ppm) of Total Organic Fluorine (TOF) when tested using combustion ion chromatography – see CSIRO Technical Specification 019.*

Evaluation for conformity of systems currently certified by ActivFire

The following are key requirements that will be evaluated for conformity to AS 5062:2022 are but not limited to the following, if there have been no changes to the system:

1. Fire extinguishing performance tests, as selected from Section 5.6 for systems specified for local application and/or total flooding, witnessed by a CSIRO representative on-site.
2. Review of test reports relating to Test No 1 of Appendix D, prior to the fire extinguishing performance test described above, to verify that the nozzle with lowest average discharge pressure has been determined across all system/container sizes.
3. Review of test reports relating to Test No 22 of Appendix D, to verify fluorine content of system extinguishing agent.
4. Review of evidence that the system detection device(s) are listed to a recognized standard by a recognised testing and approval body.
5. Review of evidence of compliance to EMC requirements of Clause 9.7.1.

Changes to certification provided by CSIRO

Registrants of this category of system are required to provide evidence of conformity to AS 5062:2022 no later than 31 December 2025. Re-certification of systems by CSIRO ActivFire® Scheme to superseded versions of AS 5062 will not occur in 2026.

Timeline of changes

November 2022

- AS 5062:2022 published by Standards Australia.

February 2023

- CSIRO Fire Systems Laboratory ceased accepting new applications for full evaluation of conformity to AS 5062:2016.
- CSIRO's ActivFire® Scheme ceased accepting applications for the certification of vehicle fire suppression products to AS 5062:2016.

April 2023

- Existing vehicle fire suppression systems listed with CSIRO's ActivFire® Scheme to superseded versions of AS 5062 were re-validated.

January 2024

AN-006 published (this document)



April 2024 and April 2025

- Existing vehicle fire suppression products listed with CSIRO's ActivFire® Scheme to superseded versions of AS 5062 will be revalidated.

March 2025

- CSIRO Technical Specification TS-014 'Testing and certification of fire suppression systems for mobile and transportable equipment' published.

December 2025

- Applications close for application for evaluation and validation to CSIRO Technical Specification TS-014 and AS 5062:2022, to maintain registration of existing certified system after 30 April 2026.

Issuing Authorities

Kai Loh, Executive Office, ActivFire Scheme – CSIRO Verification Services

Dr. Christopher Preston, Director – Infrastructure Technologies

Issue date

31-Mar-2025

Version

v2 – Publication of CSIRO Technical Specification TS-014.

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ActivFire® Advisory Note AN-006 v2

For further information

ActivFire® Scheme / Fire Systems Laboratory
Infrastructure Technologies

certification@csiro.au / conformity_services@csiro.au
research.csiro.au/infratech/

Issue date: 31-Mar-2025