

# European Aviation Safety Agency

## European Technical Standard Order

**Subject:** Portable Water-Solution Type Hand Fire Extinguishers

### 1 — Applicability

This ETSO gives the requirements which new models of portable water-solution type hand fire extinguishers that are designed and manufactured on or after the date of this ETSO must meet in order to be identified with the applicable ETSO marking.

### 2 — Procedures

#### 2.1 — General

Applicable procedures are detailed in CS-ETSO Subpart A.

#### 2.2 — Specific

None.

### 3 — Technical Conditions

#### 3.1 — Basic

##### 3.1.1 — Minimum Performance Standard

Standards set forth in the SAE Aerospace Standard document: AS245A AS-245B, 'Water Solution Type Hand Fire Extinguisher', dated November 1, 1948, revised December 15, 1956 and supplemented by this ETSO (revised) April 2004, as modified in Appendix 1 of this ETSO.

##### 3.1.2 — Environmental Standard

See CS-ETSO Subpart A paragraph 2.1

##### 3.1.3 — Computer Software

None.

#### 3.2 — Specific

none

### 4 — Marking

#### 4.1 — General

Marking is detailed in CS-ETSO Subpart A paragraph 1.2.

Instead of optional serial number the date of manufacture has to be marked.

4.2 — Specific

As specified in the SAE Aerospace Standard document AS245A AS245B paragraph 3.2.

5 — **Availability of Referenced Document**

See CS-ETSO Subpart A paragraph 3

**APPENDIX 1.****MPS FOR PORTABLE WATER SOLUTION TYPE HAND FIRE EXTINGUISHERS**

The applicable standard is SAE AS245B, Water Solution Type Hand Fire Extinguisher, dated (revised) April 2004 shall be modified as follows:

<b>AS245B section</b>	<b>Action</b>									
Paragraph 4.1.2: Burst pressure	to be revised as follows: Burst pressure must be equal or greater than 'b' times Design pressure (see table 1 below). Design pressure is compatible with maximum pressure encountered in use of extinguisher and ensures a long service of equipment when charged.									
Paragraph 5. Individual Performance Requirements:	to be revised as follows: All extinguishers, or extinguisher components shall be subject at a minimum to the following tests:									
	Requirement to be added: proof pressure must be equal or greater than 'p' times Design pressure (see table 1 below).  Table 1: 'b' and 'p' factors indicated depend on extinguisher type									
	<table border="1"> <thead> <tr> <th></th> <th>b</th> <th>p</th> </tr> </thead> <tbody> <tr> <td>Type I</td> <td>2,7</td> <td>1,5</td> </tr> <tr> <td>Type II</td> <td>2,4</td> <td>1,2</td> </tr> </tbody> </table>		b	p	Type I	2,7	1,5	Type II	2,4	1,2
	b	p								
Type I	2,7	1,5								
Type II	2,4	1,2								