AS/NZS 1850:1997 (Incorporating Amendment No. 1)

# Australian/New Zealand Standard<sup>™</sup>

Portable fire extinguishers— Classification, rating and performance testing





#### AS/NZS 1850:1997

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee FP/3, Fire Extinguishers. It was approved on behalf of the Council of Standards Australia on 24 December 1996 and on behalf of the Council of Standards New Zealand on 31 January 1997. It was published on 5 April 1997.

The following interests are represented on Committee FP/3:

Asset Services Department of Administration Services Australian Building Codes Board Australian Competition and Consumer Commission Australian Fire Authorities Council Australian Fire Protection Association Commonwealth Fire Board Consumers' Federation of Australia Department of Defence Federal Bureau of Consumer Affairs (Australia) Fire Protection Industry Association of Australia Fire Trainers Association of Australia New Zealand Fire Equipment Association New Zealand Fire Protection Association Office of Fair Trading and Business Affairs (Victoria) Western Australia Fire Brigade Board WorkCover, N.S.W.

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This Standard was issued in draft form for comment as DR 95478.

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### Portable fire extinguishers— Classification, rating and performance testing

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2

### PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee FP/3 on Fire Extinguishers to supersede AS 1850—1994 and NZS 4507:1978, and provide a common test regime for use in Australia and New Zealand.

This Standard incorporates Amendment No. 1 (July 2001). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note table, figure or part thereof affected.

The Standard was originally prepared following a request from manufacturers to develop a system of classification and rating of fire extinguishers by test fires in order that an extinguishant could be given a rating appropriate to the class of fire. The ultimate classification and rating of an extinguisher or its recommended use is based on its fire-extinguishing potential as determined by the appropriate tests.

It is pointed out that, irrespective of its fire-extinguishing potential, the extinguisher must comply with the requirements of the appropriate Australian Standard according to its extinguishant.

In preparing this Standard, the Committee considered that water-type extinguishers should have a classification and rating allotted without extinguishing an actual test fire, provided that such extinguishers complied with the appropriate design and performance requirements for a capacity of not less than 9 L, effective range and duration of discharge.

This Standard sets out a series of type tests for fire extinguishers designed and manufactured to AS/NZS 1841, *Portable fire extinguishers*, to establish their fire-extinguishing potential. The tests cover an extinguisher's capability of controlling fires classified as A, B, C, D and F, together with the suitability of the extinguishant's for use on fires involving energized electrical equipment.

The resulting classification, performance rated values and capabilities are given on the front label of each extinguisher to assist the purchaser in selecting the appropriate type of extinguisher for the expected hazard.

Requirements for portable fire extinguishers are specified by the following Standards:

### AS/NZS

- 1841Portable fire extinguishers1841.1Part 1: General requirements
- 1841.2 Part 2: Water type
- 1841.3 Part 3: Wet chemical type
- 1841.4 Part 4: Foam type
- 1841.5 Part 5: Powder type
- 1841.6 Part 6: Carbon dioxide type
- 1841.7 Part 7: Vaporizing-liquid type
- 1841.8 Part 8: Non-rechargeable type
- 4353 Portable fire extinguishers—Aerosol type

### CONTENTS

SECTIC	ON 1 SCOPE AND GENERAL	
1.1	SCOPE	
1.2	REFERENCED DOCUMENTS	4
1.3	CLASSIFICATION	4
1.4	RATING	5
1.5	ELECTRICAL NON-CONDUCTIVITY	
SECTION 2 GENERAL REQUIREMENTS FOR PERFORMANCE TESTS		
2.1	GENERAL	6
2.2	END-POINT	6
2.3	NUMBER OF TEST FIRES	6
2.4	ACTIVATION OF EXTINGUISHERS	6
2.5	STORAGE AND TEST TEMPERATURE	
2.6	TEST CONDITIONS	
2.7	DISCHARGE CONDITIONS	
2.8	TEST PERSONNEL	
2.0		0
SECTIC	ON 3 CLASS A PERFORMANCE TEST	
3.1	CLASSIFICATION AND RATING	7
3.2	WOOD CRIB TEST FIRE	7
3.3	OBSERVATIONS	8
SECTIC	ON 4 CLASS B PERFORMANCE TEST	
4.1	CLASSIFICATION AND RATING	
4.2	FLAMMABLE LIQUID TEST FIRE	
4.3	OBSERVATIONS	11
~ ~ ~ ~ ~		
	ON 5 CLASS C PERFORMANCE TEST	
5.1	CAPABILITY	
5.2	CLASS C TEST FIRE	
5.3	OBSERVATIONS	12
OF CTIC		
SECTION 6 CLASS D PERFORMANCE TEST		
6.1	CAPABILITY DISCHARGE CHARACTERISTICS	
6.2		
6.3	MARKING	13
SECTIC	N 7 ELECTRICAL NON-CONDUCTIVITY TEST	
7.1	CAPABILITY FOR USE ON ELECTRICALLY ENERGIZED EQUIPMENT	1/
7.1	ELECTRICAL NON-CONDUCTIVITY TEST	
7.2	MOUNTING TARGET	
7.5 7.4	CONNECTIONS TO EXTINGUISHER AND TARGET	
7.5	ELECTRICAL CIRCUITS	
7.6	CURRENT FLOW METER	
7.7	TEST METHODS	17
SECTION 8 CLASS F PERFORMANCE TEST		
		10
8.1	CLASSIFICATION AND RATING	
8.2	COOKING OIL TEST FIRES	
8.3	OBSERVATIONS	21



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