ISO 7203-3:2011-08 (E)

Fire extinguishing media - Foam concentrates - Part 3: Specification for low-expansion foam concentrates fo r top application to water-miscible liquids

Contents

Page

Foreword v

Introduction vi

1 Scope 1

2 Normative references 1

3 Terms and definitions 2

4 Grades and uses of foam concentrates 3
4.1 Grades 3
4.2 Use with sea water 4

5 Tolerance of the foam concentrate to freezing and thawing 4

6 Sediment in the foam concentrate 4
6.1 Sediment before ageing 4
6.2 Sediment after ageing 4

7 Viscosity of the foam concentrate 4
7.1 Newtonian foam concentrates 4
7.2 Pseudo-plastic foam concentrates 4

8 pH of the foam concentrate 4
8.1 pH limits 4
8.2 Sensitivity to temperature 5

9 Surface tension of the foam solution 5
9.1 Before temperature conditioning 5
9.2 Temperature sensitivity 5

10 Interfacial tension between the foam solution and cyclohexane 5
10.1 Before temperature conditioning 5
10.2 Temperature sensitivity 5

11 Spreading coefficient of the foam solution on cyclohexane 5

12 Expansion and drainage of foam 6
12.1 Expansion 6
12.2 Drainage 6

13 Test fire performance 6

14 Marking, packaging and specification sheet 7
14.1 Marking 7
14.2 Packaging 7
14.3 Specification sheet 7

Annex A (normative) Preliminary sampling and conditioning of the foam concentrate 8

Annex B (normative) Determination of tolerance to freezing and thawing 9

Annex C (normative) Determination of percentage of sediment 11

Annex D (normative) Determination of viscosity for pseudo-plastic foam concentrates 12

Annex E (normative) Determination of surface tension, interfacial tension and spreading coefficient 14

Annex F (normative) Determination of expansion and drainage time 15

Annex G (normative) Determination of test fire performance 20

Annex H (informative) Small-scale fire test 24

Annex I (informative) Description of a radiation measurement method 34

Annex J (informative) Compatibility 38

Bibliography 39