

# DIN EN 1568-2:2018-05 (E)

## Fire extinguishing media - Foam concentrates - Part 2: Specification for high expansion foam concentrates for surface application to water-immiscible liquids

---

<b>Contents</b>		<b>Page</b>
European foreword .....		5
Introduction .....		7
1	Scope .....	8
2	Normative references .....	8
3	Terms and definitions .....	9
4	Sediment in the foam concentrate .....	10
4.1	Sediment before ageing .....	10
4.2	Sediment after ageing .....	10
5	Freezing point .....	10
6	Viscosity of the foam concentrate .....	11
6.1	Newtonian foam concentrates .....	11
6.2	Pseudo-plastic foam concentrates .....	11
7	pH of the foam concentrate .....	11
8	Surface tension of the foam solution .....	11
9	Stability/separation test of foam concentrate .....	11
10	Determination of expansion and drainage time .....	11
10.1	Before temperature conditioning .....	11
10.2	After temperature conditioning .....	11
11	Test fire performance .....	12
12	Occupational health and ecotoxicological information .....	12
13	Technical data sheet .....	12
14	Container marking .....	12
Annex A (informative) Grades of foam concentrates .....		14
Annex B (normative) Sampling of foam concentrates .....		15
Annex C (normative) Determination of percentage sediment .....		16
C.1	Sampling .....	16
C.2	Apparatus .....	16
C.3	Procedure .....	16
Annex D (normative) Determination of viscosity for pseudo-plastic foam concentrates .....		17
D.1	Pseudo-plastic foam concentrates .....	17

D.2	Viscosity determination .....	17
D.2.1	Apparatus .....	17
D.2.2	Test temperatures .....	17
D.2.3	Viscosity measurement .....	17
D.2.4	Results .....	18
Annex E (normative) Temperature conditioning of foam concentrates .....		19
E.1	General .....	19
E.2	Low temperature conditioning .....	19
E.2.1	Apparatus .....	19
E.2.2	Procedure .....	19
E.3	High temperature conditioning .....	19
E.3.1	Apparatus .....	19
E.3.2	Procedure .....	19
E.4	Division into top and bottom half-samples .....	20
E.4.1	Apparatus .....	20
E.4.2	Procedure .....	21
Annex F (normative) Determination of surface tension .....		22
F.1	Solution of foam concentrate .....	22
F.2	Procedure -- Surface tension .....	22
Annex G (normative) Determination of expansion and drainage time .....		23
G.1	Apparatus .....	23
G.2	Temperature conditions .....	23
G.3	Procedure .....	23
G.4	Simulated fresh and sea water .....	24
Annex H (normative) Determination of test fire performance .....		29
H.1	General .....	29
H.2	General conditions .....	29
H.2.1	Test series and criteria for success .....	29
H.2.2	Temperature and wind speed .....	29
H.2.3	Records .....	29
H.2.4	Foam solution .....	30
H.2.5	Fuel .....	30
H.3	Fire test .....	30
H.3.1	Apparatus .....	30
H.3.2	Test procedure .....	31
Annex I (normative) Freezing point determination .....		33
I.1	General .....	33
I.2	Apparatus .....	33
I.3	Procedure: .....	33
I.4	Example of a temperature against time curve for evaluation: .....	34
Annex J (normative) Stability/Separation test of foam concentrate .....		35
J.1	General .....	35
J.2	Apparatus .....	35
J.3	Procedure .....	35
Annex K (normative) Occupational health and ecotoxicological testing .....		36
Annex L (informative) Example for a technical data sheet .....		37
Annex M (informative) A-Deviations .....		39
Bibliography .....		41