



MOUSSOL[®]-FF / MOUSSOL[®]-FF Plus

alcohol resistant fluorine-free fire extinguishing foam concentrates



MOUSSOL[®]-FF is alcohol resistant, fluorine-free and 100% biodegradable. It is based on selected sustainable surface- and interface-active ingredients, polymer film formers along with foam stabilising and antifreeze agents. MOUSSOL[®]-FF is used universally for low-, medium- and high-expansion foam applications.

MOUSSOL[®]-FF Plus is a newly formulated product and differs from MOUSSOL[®]-FF in viscosity and ingredients. In the low-expansion range it is applied with an expansion ratio of > 5:1. It is also used for medium- and high-expansion foam applications. Excellent extinguishing times are achieved in particular with compressed air-foam technology (CAFS). Since MOUSSOL[®]-FF Plus is fully biodegradable it is also suitable for training purposes and for fighting solid fuel fires.



MOUSSOL[®] -FF / MOUSSOL[®] -FF Plus

alcohol resistant fluorine-free fire extinguishing foam concentrates

Properties

- polymer-film forming fire extinguishing foam concentrate, stable on both polar¹ and non-polar² flammable liquids and their mixtures
- readily expanding and suitable for generating low-, medium- and high-expansion foam; on polar liquids the polymer film forms a safe barrier against the foam-destroying effect of the chemical.

Application

- with all standard foam equipment and fixed installations for low-, medium- and high-expansion foam applications for class A and B fires (see product data sheet for further information)
- especially designed for extinguishing polar, foam-destroying liquids, e.g. alcohols as well as non-polar hydrocarbons, e.g. petroleum products
- excellent vapour suppression on spills of polar¹ and non-polar² flammable liquids due to very long water drainage times.
- quick fire extinguishing results with hollow-stream nozzles on class B fires at expansion ratios from 5:1; foam attachment may be required.

Products	MOUSSOL [®] -FF	MOUSSOL [®] -FF Plus
Induction rate	3% for non-polar ² hydrocarbons (e.g. petroleum products) 3% - 6% for polar ¹ and foam destroying liquids depending on the fuel (e.g. 3% for ethanol) 0.3% - 0.5% as wetting agent	3% for non-polar ² hydrocarbons (e.g. aviation fuel) 3% - 6% for polar ¹ liquids (e.g. alcohols) 0.3% - 0.5% as wetting agent
Foam expansion*	Low expansion foam up to 10 times Medium expansion foam up to 100 times High expansion foam up to 800 times	Low expansion foam up to 5 times Medium expansion foam up to 100 times High expansion foam up to 800 times
Water drainage time* 25%/50%	Low expansion foam up to 8/15 Min. Medium expansion foam up to 5/10 Min. High expansion foam up to 4/6 Min.	Low expansion foam up to 8/15 Min. Medium expansion foam up to 5/10 Min. High expansion foam up to 4/6 Min.
Frost resistance	-5 °C / -15 °C	-15 °C
Viscosity	pseudoplastic, pump assisted proportioning may be required	
Application	Fires of foam destroying polar ¹ solvents and non-polar ² hydrocarbons	
Certification	DIN EN 1568 part 1 - 4 and ICAO Level B certified; LASTfire aspirated / systems batch tested: "good / good"	DIN EN 1568 part 1-4; ICAO Level B;
Physiological/ ecological properties	MOUSSOL [®] -FF and MOUSSOL [®] -FF Plus are fluorine free, physiologically harmless and easily biodegradable. Further information can be found in the material safety data sheets	

¹polar = water miscible ²non-polar = water immiscible

*according to DIN EN 1568 part 1-4

