

MOUSSOL®-APS MARINE 3/3 F-10 #3303

ALCOHOL RESISTANT AFFF FOAM CONCENTRATE



Description

MOUSSOL®-APS MARINE 3/3 F-10 is a pseudo-plastic, alcohol resistant AFFF fire extinguishing foam concentrate. Polymer film formers, aqueous film forming fluorine components and foam stabilizers characterize the composition of this excellent fire extinguishing foam concentrate. In parts, the product is made from organic, renewable sources. Using only the latest C6 technology, this product is in full compliance with Directive EU 757/2010.

Properties

MOUSSOL®-APS MARINE 3/3 F-10 provides excellent flowability, extinguishing performance and sealing properties on both polar fuels (e.g. alcohol, ketones, esters, etc.) and non-polar hydrocarbons (e.g. petroleum products, Gazo-line, etc.).

MOUSSOL®-APS MARINE 3/3 F-10 may be used with salt, brackish or treated industrial water*.

On non-polar fuels an aqueous film is formed by the fluorochemicals in the foam concentrate. This thin water layer on top of the fuel generates a slippery surface for easing the foam to spread across plus blocks vapors very efficiently from penetrating openings in the foam blanket.

On polar fuels a chemical interaction between the fuel and the polymer-film forming ingredients generates a protective polymer layer shielding the foam blanket from destructive effects of the fuel. The unique combination of these film-forming and securing components of *MOUSSOL®-APS MARINE 3/3 F-10* are pre-requisites for a successful and fast extinguishment, and a long-lasting safeguard against re-ignition with solid reserves

*Note: Treated industrial water must not contain any foam destroying chemicals. In case of doubt we recommend to use different water sources.

Application

MOUSSOL®-APS MARINE 3/3 F-10 is applied at 3% v/v proportioning with all usual mobile or fixed low-expansion foam equipment. On non-polar fuels application by non-aspirated devices (sprinklers, deluge systems, water monitors etc.) is possible if a minimum expansion ratio of 1:2 is achieved. Achieving successful extinguishment of polar fuel fires requires the presence of foam hence non-aspirated devices may not be used. To achieve best extinguishing performance on polar fuel fires, gentle application methods, using e.g.

goose necks or foam sliders, are recommended. Temperatures $\leq 5^{\circ}\text{C}$ may require pump-assisted induction. When used near electrical installations observe DIN/VDE-0132, or equivalent national standards.

Environment

None of the raw materials used in our products are banned. Our foam concentrates comply with the latest environmental regulations, such as 'Commission Regulation (EU) No 757/2010', amending '(EC) No 850/2004.' *MOUSSOL®-APS MARINE 3/3 F-10* will also comply with the 'significant new use rule (SNUR)' for long-chain perfluoroalkyl carboxylate proposed by the Environmental Protection Agency, which will come into effect in due course.

Compatibility with other foam concentrates

Mixing for immediate use:

MOUSSOL®-APS MARINE 3/3 F-10 can be mixed at any proportion with equivalent foam concentrates if used immediately.

Mixing for long term storage:

It is not recommended to mix *MOUSSOL®-APS MARINE 3/3 F-10* with equivalent foam concentrates when stored. Prior to replenishment, the quality of *MOUSSOL®-APS MARINE 3/3 F-10* stocks should be examined by our laboratory.

Mixing with synthetic concentrates:

MOUSSOL®-APS MARINE 3/3 F-10 must not be mixed with other types foam concentrates.

Mixing with other expanded foams:

MOUSSOL®-APS MARINE 3/3 F-10 foam is compatible with all other generated fire fighting foams.

Compatibility with powder

MOUSSOL®-APS MARINE 3/3 F-10 is suitable for the combined use with foam compatible dry chemical powders.

Packaging

MOUSSOL®-APS MARINE 3/3 F-10 is available in plastic cans, plastic drums, IBC's (totes) and in bulk.

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Storage

MOUSSOL®-APS MARINE 3/3 F-10 is stored long term in the sealed original containers or in non-corrosive plastic or stainless steel tanks. High temperatures up to 50°C do not affect the quality, neither does temporary freezing below the specified frost resistance limit (see technical leaflet TM 014 "Storage of synthetic foam concentrates"). Before re-filling foam concentrate stocks arrange for a quality check-up by our laboratory.

Shelf Life

MOUSSOL®-APS MARINE 3/3 F-10 has a shelf life of >10 years, if stored according to our recommendations (see technical info leaflet TM014 'Storage of Synthetic Fire Extinguishing Foam Concentrates').

Conformity/Listings

MOUSSOL®-APS MARINE 3/3 F-10 is approved as fire extinguishing agent for fires of class A and B according to the following standards:



IMO MSC.1/Circ. 1312 non-polar (Heptane)
IMO MSC.1/Circ. 1312 polar (Alcohol)

Physical properties and technical data		MOUSSOL®-APS MARINE 3/3 F-10	
Recommended induction rate	3% 3%	low expansion foam low expansion foam	non-polar liquids polar liquids
Foam expansion* (according to EN 1568)	5 - 8	low expansion foam*	
25%/50% water drainage time* (according to EN 1568)	1 - 5 minutes	3 - 7 minutes	low expansion foam*
Colour	yellow to brown		
pH value	at 20°C	6,5 - 8,5	
Density	at 20°C	1,050 ± 0,02 g/ml	
Sediments	none		
Surface tension/Spreading coefficient	< 17,5 mN/m	> 3 mN/m (Cyclohexane)	
Frost resistance	-10°C		
Viscosity	at 20°C at 0°C at -10°C	< 250(100) < 400(150) < 500(200)	mPa*s bei 75(375) 1/s mPa*s bei 75(375) 1/s mPa*s bei 75(375) 1/s
Environmental acceptability	MOUSSOL®-APS MARINE 3/3 F-10 is readily bio degradable. Fluorine components are not fully degradable. See material safety data sheet for further information.		
Special notes	MOUSSOL®-APS MARINE 3/3 F-10 poses no health risk, provided it is used as intended as fire extinguishing foam. Firefighting exercise and testing may have to be agreed with local authorities. Consider when spraying persons with foam that they will not be able to breathe whilst covered with foam. See material safety data sheet for further information.		



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