

# MOUSSOL®-APS LV 1/3 F-15 #6441

## ALCOHOL RESISTANT AFFF FOAM CONCENTRATE



## **Description**

MOUSSOL®-APS LV 1/3 F-15 #6441 is an alcohol resistant low viscosity AFFF fire extinguishing foam concentrate without added polysaccharides. It is based on special, fluorinated components, surfactants, antifreezing compounds and foam stabelisers.

MOUSSOL®-APS LV 1/3 F-15 #6441 is a newtonian liquid and does not contain polymers. In parts, the product is made from natural, renewable sources. The fluorinated components contained in MOUSSOL®-APS LV 1/3 F-15 #6441 are in full compliance with Directive EU 757/2010.

## **Properties**

Due to its low viscosity, MOUSSOL®-APS LV 1/3 F-15 #6441 flows freely up to the freeze point. The foam is resistant against polar solvents and non-polar, foam destroying hydrocarbons alike. On non-polar hydrocarbons MOUSSOL®-APS LV 1/3 F-15 #6441 forms an externely thin, aqueos film which flows ahead of the foam. A relatively short water drainage time enhances aqueous film formation and the flowability of the foam. This effect reduces the extinction time significantly and cools down the fire source. Aqueous film forming components allow its non-aspirated application on mineral oil based hydrocarbons. On polar solvents, a film forms which provides for a safe barrier against the foam destroying properties of the chemical. MOUSSOL®-APS LV 1/3 F-15 #6441 provides for fast and effective extinction of class A + B fires. The foam is stable and forms a lasting. gastight layer over the flammable surface. The risk of re-ignition of extinguished areas is reduced considerably.

#### **Application**

MOUSSOL®-APS LV 1/3 F-15 #6441 is used with all standard low and medium expansion foam foam installations and mobile equipment. It is specially designed for polar, foam destroying liquids, e.g. alcohols, esters, ketones as well as non-polar hydrocarbons, e.g. petroleum products. The induction rate is 3% in wa-

ter for polar solvents and 1% for hydrocarbon fires. For medium expansion foam applications on hydrocarbon fires the induction rate is 3%. Aqueous film forming fluorine components allow for non-aspirated application on non-polar hydrocarbons.

MOUSSOL®-APS LV 1/3 F-15 #6441 is also used to cover spilled chemicals to prevent flammable and toxic gas emissions. A gentle foam application is required in order to combat polar solvent fires effectively (see technical leaflet TM 037 "Extinguishing alcohol fires").

MOUSSOL®-APS LV 1/3 F-15 #6441 is used with tap water, seawater, brackish water and treated industrial water. When used in the presence of electrical installations observe DIN/VDE-0132, or equivalent national standards.

## **Compatibility**

#### on immediate use:

MOUSSOL®-APS LV 1/3 F-15 #6441 can be mixed at any proportion with equivalent foam concentrates if used immediately.

#### on storage:

It is not recommended to mix MOUSSOL®-APS LV 1/3 F-15 #6441 with equivalent foam concentrates when stored. Prior to replenishment, the quality of MOUSSOL®-APS LV 1/3 F-15 #6441 stocks should be examined by our laboratory.

## with other foam concentrates:

MOUSSOL®-APS LV 1/3 F-15 #6441 must not be mixed with other types foam concentrates.

#### with other expanded foams:

MOUSSOL®-APS LV 1/3 F-15 #6441 foam is compatible with all other generated fire fighting foams.

## Compatibility with powder

MOUSSOL®-APS LV 1/3 F-15 #6441 is suitable for the combined use with foam compatible dry chemical powders.

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## Storage

MOUSSOL®-APS LV 1/3 F-15 #6441 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.

## **Approval**

MOUSSOL®-APS LV 1/3 F-15 #6441 is tested/type approved as fire extinguishing agent for class A + B fires according to the following standards:



Certificate No.: KB-264/14

Part 3 (Heptane): IB/IB --- Part 4 (IPA): IC/IC

Part 1: Medium ex. ---



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

Physical properties and technical data MOUSSOL®-APS LV 1/3 F-15 #6441				
Recommended induction rate		1% 3% 3%	low expansion foam medium expansion foam low expansion foam	non-polar liquids non-polar liquids polar liquids
Foam expansion* (according to EN 1568)		5 - 10 60 - 120	low expansion foam* medium expansion foam*	
25%/50% water drainage time* (according to EN 1568)		2 - 4 minutes 1 - 3 minutes 2 - 5 minutes	4 - 8 minutes 3 - 5 minutes 5 - 10 minutes	low expansion foam* medium expansion foam* medium expansion foam*
Colour		yellow to brown		
pH value at 20	0°C	6,5 - 8,5		
Density at 20	0°C	$1,060 \pm 0,02 \text{ g/ml}$		
Sediments		none		
Surface tension/Spreading coefficient		< 17,5 mN/m	> 3 mN/m (Cyclohexane)	
Frost resistance		-15°C		
at (	0°C 0°C 5°C	< 10 mm²/sec < 20 mm²/sec < 40 mm²/sec		
Environmental acceptability		MOUSSOL®-APS LV 1/3 F-15 #6441 is physiologically harmless and readily bio degradable. Fluorine components are not fully degradable. See material safety data sheet for further information.		
Special notes		MOUSSOL®-APS LV 1/3 F-15 #6441 poses no health risk, provided it is used as intended as fire extinguishing foam. Fire fighting exercise and testing may have to be agreed with local authorities. Take into account 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.		
	*	Foam expansion and	d drainage times may vary, deper	nding on foam equipment and operating pressure.



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