SILVANI

POLIFILM K 3%

FILM-FORMING FLUOROSYNTHETIC 3% (AFFF) UL LISTED

POLIFILM K 3% is a fluorosynthetic foam concentrate AFFF (Aqueous Film Forming Foam), based on hydrocarbon surfactants, fluorinated surfactants and special stabilising agents.
POLIFILM K 3% can be mixed with fresh or sea water and, used with low and/or medium expansion equipment, generates a foam suitable for extinguishing class A and B fires. For solid fuel fires (class A), in particular, POLIFILM K 3% improves the wetting and penetrating capability of the water.
The distinctive characteristics of POLIFILM K 3% are the formation of an aqueous film that floats on the hydrocarbons, which are generally lighter than water. This film, which is the result of the surface and interface tensions that are generated between the water solution of POLIFILM K 3% and the fuel, acts as an insulating barrier, against both the flammable vapours and the oxygen present in the atmosphere.
This last characteristics means that the product can be used to prevent ignition, on either non-ignited hydrocarbons (whenever the necessity should arise), or in the case of emergency, or during maintenance operations on plants.
The elevated spreading capability of the aqueous film and, above all, its heightened ability to recompose itself, even when it is submitted to mechanical destructive stress, make POLIFILM K 3% the only foam compound able to bring the most difficult fires under control very rapidly: an important factor, especially in cases where speed and efficiency are essential in saving lives and goods.
Owing to its particular characteristics, POLIFILM K 3% is found to be especially suitable for high-risk operations, such as airports, offshore platforms, heliports, refineries, petrochemical plants, where the goods to protect have a high intrinsic value.

Other Characteristics

- Versatility: the product can be used with any foam producing equipment (sprinklers; low, medium, high expansion foam generators)
- Speed and economy in extinguishing: the extinguishing speed is 2-3 times faster than that obtained, at the same flow rate, with any other protein compound
- Impact on environment/man: it is biodegradable, non-toxic and non-harmful
- Stability and storage: it is non-corrosive, it does not decompose, it is stable; in comparison with other protein-based products, it has double shelf life and, if it is stored according to the recommendations, it lasts for many years
- Compatibility: it can be used simultaneously with dry chemicals (Twin Agent Systems) and, in particular, the combination with special powder increases the ability to smother the flames to such an extent that the system becomes the fastest of all and, because of that, is suitable for emergency operations (in airports, for example)
- Reliability: the fire-fighting teams, certain of using a highly efficient product, tackle the fire with more determination, which increases the success rate significantly. It is also due to this that the major civil and military organisations have now used POLIFILM K 3%
- Freezing point ≤ - 10°C

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PRODUCT NAME	POLIFILM K 3%
CLASSIFICATION	FILM-FORMING FLUOROSYNTHETIC (AFFF)
TYPE	UL LISTED
APPEARANCE	Amber Newtonian liquid
CONCENTRATION OF USE (% v/v)	3
FREEZING TEMPERATURE (°C)	≤ - 10
VISCOSITY + 20°C (mm²/s)	≤ 10
SPECIFIC GRAVITY AT +15°C (g/ml)	1.04 ± 0.01
pH VALUE AT + 20°C	7.5 ± 0.5
SEDIMENTS (%)	≤ 0.1
COMPATIBILITY WITH POWDERS	Excellent
MINIMUM TEMPERATURE OF USE (°C)	- 6.7
MAXIMUM STORAGE TEMPERATURE (°C)	+49 Continuous

Foaming capacity

As for all foam concentrates, the foaming capacity widely depends upon the efficiency of the various equipment used and the operational conditions.
When tested to UL 162 specifications, the product gives the following performances:

EXPANSION RATIO	≥ 8
25% DRAINAGE TIME	≥ 2 MIN 30 S

Storage

Polifilm K 3% is a stable product and, if suitably stored in its original packing, it has an average shelf-life of at least 10 years.

Environmental information

Polifilm K 3% is biodegradable. The concentration and its solutions can be normally disposed of in biological treatment plants.

Product standard packing and code

PACKING	CANISTER	DRUM
NOMINAL CAPACITY (l)	30	220
DIMENSIONS (mm)	375 x 284 x 397 H	581 D x 935 H
CONTAINER TARE (Kg)	1.5	8.5
MATERIAL	HIGH DENSITY POLYETHYLENE HIGH MOLECULAR WEIGHT	HIGH DENSITY POLYETHYLENE HIGH MOLECULAR WEIGHT
CONTAINER APPROVAL	UN 3H1/Y1.8/250	UN 1H1/Y1.9/200
NET CONTENTS (l)	25	200
POLIFILM K 3% CODE	1808130025	18081310200

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