



SOLVENSEAL K UNIVERSAL FLUOROSYNTHETIC 3X6 (AFFF/AR)

SOLVENSEAL K is part of a new generation of synthetic liquid universal foaming agents, which may be used to produce low, medium and high expansion foams and is suitable for fire suppression of hydrocarbon and solvent polar fires (alcohols, ketones, acids, etc.).

SOLVENSEAL K-foam is stabilised by special polymers and forms a very resistant layer on polar solvents that isolates the foam from the fuel, thus enhancing its covering and extinguishing properties. In addition to this, the foam has a strong sealing potential and, therefore, is able to re-coalesce the film if breakdown due to mechanical stress occurs.

SOLVENSEAL K behaves like a strengthened AFFF foaming agent with respect to hydrocarbons. This is related to the high concentration of fluoride surfactants and polymers, which permit the formation of an adhesive film that rapidly suppresses fire. The product is normally mixed with fresh or sea water at a concentration of 6% for polar solvents and 3% for hydrocarbons.

The specific application (l/min/m²) of SOLVENSEAL K depends on the risk nature; however it assures a safety margin much higher than the margin indicated by the strictest regulations (UL and NFPA).

Given its specific characteristics, SOLVENSEAL K is recommended for fire hazards deriving from the transport and handling of a series of chemical products (typical in petrolchemical complexes and warehouses).

Finally, SOLVENSEAL K is suitable for a wide range of applications and may be used at low, medium and high expansion ratios. This makes SOLVENSEAL K an ideal solution in the case of difficult fire interventions where success has to be guaranteed. The versatility of this product simplifies the design of fire systems, with considerable savings in terms of construction and management of the same.

Other characteristics:

- Long storage time (for the conditions recommended)
- Solution stability in both fresh and sea water (unlike the foaming agents for alcohols, the product does not undergo ageing and the solutions resist for several months).
- Very high extinguishing capability of hydrocarbon fires, even when the product is injected directly in the fuel and with low specific application.
- Biodegradability and harmlessness in normal operating conditions.
- High extinguishing capability in fires of polar solvents.
- Compatibility with extinguishing powders.
- Possible combined use with "Twin Agent" systems.
- Freezing point $\leq -5^{\circ}\text{C}$

SOLVENSEAL K is approved by the Ministries of Internal Affairs of Hungary, Slovak Republic, Czech Republic and Korea.



Product name	SOLVENSEAL K
Classification	Universal Fluorosynthetic (AFFF/AR)
Type	Standard
Appearance	Amber-coloured Pseudo-plastic Liquid
Concentration (% v/v)	3 on hydrocarbons 6 on polar solvents
Freezing temperature (°C)	≤ - 5
Viscosity + 20°C (mm ² /s) 0 °C (mm ² /s)	≤ 1200 ≤ 1800
Density at 15°C (g/ml)	1.03 ± 0.02
pH at 20°C	7.5 ± 0.5
Sediments (%)	≤ 0.1
Compatibility with powders	Optimal
Minimum operating temp. (°C)	0
Max. storage temp. (°C)	+ 45 Continuous + 60 Intermittent

Foaming properties

As for any foaming agent, the foaming properties strongly depend on the efficiency of the equipment installed and the operating conditions.

When tested under the ISO 7203/UNI 9493/EN 1568 specifications, the product shows the following performance:

- Expansion ratio: 3% ≥ 6
6% ≥ 8
- Drainage time of 25% of the product: 3% ≥ 4 min
6% ≥ 8 min

Storage

Solvenseal K is a stable product and, if stored in the original containers, has a shelf-life of (at least) ten years.

Environmental compatibility

Solvenseal K is biodegradable. The concentrate and its solutions are normally disposed of in a biological treatment plant.

Standard containers and product codes

Container	Basket	Drum	Tank
Nominal capacity (l)	30	220	1050
Size (mm)	375 X 284 X 397 H	581 D X 935 H	1200 X 1000 X 1155 H
Container tare mass (kg)	1.5	8.5	63
Material	High density Polyethylene High molecular weight	High density Polyethylene High molecular weight	High density Polyethylene Galvanised steel
Container approval	UN 3H1/Y1.8/250	UN 1H1/Y1.9/200	UN 31HA1/Y/(1)F
Net weight of the product (kg)	25	200	1000
Protein K 6 code number	1807260025	1807260200	1807261000



SISTEMI DI SICUREZZA
Via F.lli Cervi, 15
Scanzorosciate – Bergamo -Italy
www.svsistemiassicurezza.com