

# PROTEIN K6 PROTEINIC 6% (P)

Liquid foaming agent PROTEIN K 6 is composed of a hydrosoluble protein, stabilising salts, corrosion inhibitors and antifreezing agents. PROTEIN K 6 produces a thick and stable foam which creates a continuous and cohesive isolating layer on the surface of the liquid fuel in combustion. This determines a good resistance to radiant heat and re-ignition. 6% PROTEIN K 6 is a highly concentrated product and therefore is suitable for mixtures with a concentration of 6%. PROTEIN K 6 may generate foam with expansion ratios in the range 6-10:1 and may be spread with the systems commonly available in the market.

Given its low costs and the negligible environmental impact, PROTEIN K 6 is ideal for training activities and operation tests to perform on the plants.

PROTEIN K 6 has a neutral pH, is non corrosive, non toxic and biodegradable.

PROTEIN K 6 has also been studied to offer resistance to bacterial degradation and, therefore, may be stored for several years (in the original containers). In order to avod the oxidation from the air, it is recommended to keep the storage containers or tanks filled and sealed.

In the case of storage for long periods, the maximum temperature recommended is +45°C. The freezing point is  $\leq$  -10°C.

PROTEIN K 6 is approved by RINA and Uzbekistani Ministry of Internal Affairs.

Il PROTEIN K 6 is ABS certified.





Product name	PROTEIN K 6	
Classification	Proteinic (P)	
Type	Standard	
Appearance	Brown Newtonian Liquid	
Concentration (% v/v)	6	
Freezing temperature (°C)	≤ -10	
Viscosity $+ 20^{\circ}\text{C (mm}^2/\text{s)}$	≤ 20	
- 5 °C (mm <sup>2</sup> /s)	≤ 40	
Density at 15°C (g/ml)	$1.11 \pm 0.02$	
pH at 20°C	$7.0 \pm 0.5$	
Sediments (%)	≤ 0.1	
Compatibility with powders	None	
Minimum operating temp. (°C)	-5	
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:

- $\triangleright$  Expansion ratio:  $\ge 6$
- ➤ Drainage time of 25% of the product:  $\geq$  6 min

#### **Storage**

Protein K 6 is a stable product and, if stored in the original containers, has a shelf-life of (at least) five years.

# **Environmental compatibility**

Protein K 6 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 (1)	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 density Polyethylene	High density Polyethylene
	High molecular weight	High molecular weight	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)	28	230	1100
Protein K 6 code number	1807020025	1807020200	1807021000

