

**PROTAL P****Protein based foam concentrate****For use on Hydrocarbon fires  
Low Expansion – Gentle Application****Composition**

The foam liquid PROTAL-P is composed of a mixture of hydrolysed proteins, stabilising salts and corrosion inhibitors, enabling creation of a stable foam blanket characterised by a very high burnback resistance.

**Principles of operation**

The solution obtained from PROTAL-P foam concentrate is very efficient in extinction of petroleum fires, when used in gentle or indirect application, even in the presence of overheated metal sheet structures, on account of the tough and stable foam blanket it produces.

**Induction ratio**

PROTAL-P is available in two versions :

- 3 % (3 L foam concentrate + 97 L water = 100 L foam solution)
- 6 % (6 L foam concentrate + 94 L water = 100 L foam solution)

**Method of application**

The regular protein foam concentrate PROTAL-P is recommended to be used with fixed installations in gentle, indirect application. Its best use is protection of fuel storage tanks through foam chambers and pourers.

### Field of application

PROTAL-P is mainly used for protection against fire of :

- refineries
- hydrocarbon storage tank farms
- vessels
- airport runways

### General characteristics

PROTAL-P is in conformity with all national and international standards and particularly with European standard EN 1568-3.

It can be used with fresh and sea water.

PROTAL-P properties do not change in case of frost. It recovers its initial properties as soon as it is defrosted.

### Physico-chemical Characteristics

According to EN 1568:	PROTAL-P 3	PROTAL-P 6
Foam concentrate		
• Specific gravity @ 20° C	1.16 ± 0.02 kg/l	1.15 ± 0.02 kg/l
• pH @ 20° C	6.5 – 7.5	6.5 – 7.5
• Viscosity @ 20° C	12 ± 5 mm <sub>2</sub> /s	12 ± 5 mm <sub>2</sub> /s
• Pour point	≤ - 15° C	≤ - 15° C
• Undissolved solids	≤ 0.2 %	≤ 0.2 %
Foam solution		
	3 %	6 %
• Low expansion	≥ 7	≥ 7
• 25 % drainage time	≥ 5 min	≥ 6 min