

TECHNICAL DATA SHEET

PROTAL-P Protein based foam concentrate

Standard PROTEIN foam for Hydrocarbon fires
Low Expansion - Gentle application

Composition



The foam concentrate **PROTAL-P** is composed of a mixture of hydrolyzed proteins, stabilizing salts and corrosion inhibitors, enabling creation of a stable foam blanket characterized by a very high burn back resistance.

Principle 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 contact with overheated metal sheet structures, thanks to the tough and stable foam blanket it produces.

Induction Ratio



PROTAL-P is available in two standard versions:

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

Method of Application

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

Fields of Application

PROTAL-P is designed for protection of:



Refineries



Hydrocarbon storage
tank farms



Vessels



Airport runways

General Characteristics

PROTAL-P is in conformity with all national and international standards and in particular with European standards EN 1568-1 and 3.

PROTAL-P 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.

Storage and Shelf-life



PROTAL-P has a long shelf life if stored properly in the original unbroken packaging. Its shelf life may exceed 10 years if maintained correctly. As with all foam liquids, storage temperature and conditions are important factors for an optimal shelf life.

If the product is frozen during storage or transport, thawing will render the product completely usable.

PROTAL-P is recommended to be stored away from important temperature variations and corrosive atmospheres.

Physico-Chemical Characteristics

foam concentrate	u.m.	3 %	6 %
density @ 20° C	kg/l	1.16 ± 0.02	1.15 ± 0.02
pH @ 20° C		6.5 - 7.5	6.5 - 7.5
viscosity @ 20° C	mm ² /s	12 ± 5	12 ± 5
pour point *	°C	≤ - 15	≤ - 15
undissolved solids	% V/V	≤ 0.2	≤ 0.2

Typical Foam Properties

The foam properties of **PROTAL-P** vary depending on the performance characteristics of foam equipment used and the operating conditions.

PROTAL-P tested in accordance with the EN 1568:3 gives the following typical properties:

foam solution %	3%	6%
Expansion Ratio	≥ 7	≥ 7
25% drainage time	≥ 5'	≥ 6'