

TECHNICAL DATA SHEET

PROTAL P Protein based foam concentrate

Standard PROTEIN foam for Hydrocarbon fires
Low Expansion - Gentle application

✓ **NO FLUORINE**
✓ **NO PFAs**



Composition



PROTAL P foam concentrate is a composition of hydrolyzed proteins, foam stabilizers and corrosion inhibitors, creating a highly stable foam blanket with very high burn-back resistance.

Principle of Operation



Foam formed by **PROTAL P** foam concentrate is very efficient in extinguishing petroleum fires when used in gentle or indirect application, even when in contact with overheated metal structures, thanks to the strong and stable foam blanket it produces.

Induction Ratio



PROTAL P is available in two standard versions:

- 6 % dilution: 6 L foam concentrate + 94 L water = 100 L foam solution
- 3 % dilution: 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 application. It is ideal for protection of fuel storage tanks through foam chambers and pourers.

Fields of Application

PROTAL P is primarily designed for:



Refineries



Fuel tank farms



Vessels



Airport runways

General Characteristics

PROTAL P conforms to all national and international standards and particularly to European standards EN 1568-1 and 3.

PROTAL P can be used with fresh and sea water.

PROTAL P properties are not impaired in case of freezing. 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 intact and unsealed 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, gentle thawing will render the product completely usable and without any impairment of its properties.

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 foaming 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'