TECHNICAL DATA SHEET

PROFLEX (FFFP) Film Forming FluoroProtein foam concentrate

FFFP (Film Forming FluoroProtein) foam concentrate
For use on Hydrocarbon fires - Low & Medium Expansion

Composition

This Formulation contains only telomer-based fluorosurfactants with a short chain (C6 or below) that cannot degrade in the environment into PFOA or other PFCA's.

IMPORTANT:
C6 telomer-based fluorosurfactants are NOT bioaccumulative or toxic to the environment.

PROFLEX is composed of hydrolysed proteins incorporating fluorocarbon surfactants, giving film-forming properties on the surface of hydrocarbon fires whilst maintaining high burn back resistance.

Principle of Operation

PROFLEX combines the defining qualities of two foam types: the rapid fire knock-down capability of film-forming foams, derived from their rapid diffusion over the fire surface, and the outstanding resistance to burn-back afforded by fluoroprotein type foams on critical hydrocarbon fires, typically encountered in the petroleum industry.

Induction Ratio

PROFLEX 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

PROFLEX, due to its film forming quality, can be used in direct application (nozzle or monitor), in base injection with fixed installation, and in spry application with cooling nozzles and sprinklers.

Fields of Application

The PROFLEX is highly recommended for use in:

Refineries

Petroleum tank farms

Petroleum Plants

Fuel Loading Platforms

Site yards and Plant rooms

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General Characteristics

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

PROFLEX can be used with fresh and sea water.

PROFLEX properties are not impaired in case of freezing. It recovers its initial properties as soon as it is defrosted.

Storage and Shelf-life

PROFLEX 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.

PROFLEX 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	1.15 ± 0.02
pH @ 20°C		6 - 8
viscosity @ 20°C	mm^2/s	≤ 12
pour point	°C	≤ - 15
undissolved solids	% V/V	≤ 0.2

Typical Foam Properties

The foam properties of PROFLEX vary depending on the performance characteristics of foaming equipment used and the operating conditions.

PROFLEX tested in accordance with the EN 1568:3 gives the following typical properties:

Foam solution %	**3%**	**6%**
Expansion Ratio	≥ 6	≥ 6.5
25% drainage time	≥ 2'30"	≥ 2'30"

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