

Class A Foam wetting agent to be proportioned from 0,1 to 1%

Description

PLUREX 15N is a low, medium, and high expansion, Class A foam concentrate formulated from specialty hydrocarbon surfactants, stabilizers, corrosion inhibitors and solvents. This formulation provides extremely good cold weather performance. PLUREX 15N has been proven for decades to be effective on many deep seated Class A fires such as tire fires, paper fires, coal fires, structure fires, and wild fires.

PLUREX 15N foam concentrate can be proportioned from 0.1% to 1.0% in fresh, brackish or sea water. Due to its extremely low proportioning rate, PLUREX 15N foam concentrate offers outstanding economy in: concentrate storage space, cost (compared to conventional 3% and 6% foaming agents) and water hauling requirement.

Example:

How much PLUREX 15N concentrate is required to make 500 Liter of foam solution?

At 0.1% concentration:

$500 \text{ L} \times 0.001 = 0.5 \text{ L}$ of concentrate

At 0.6% concentration:

$500 \text{ L} \times 0.006 = 3 \text{ L}$ of concentrate

At 1.0% concentration:

$500 \text{ L} \times 0.01 = 5 \text{ L}$ of concentrate

Performance

Fire extinguishment mechanisms in effect when using PLUREX 15N "Class A" Fire Control Concentrate include:

- Reduction of the surface tension of water, which provides the PLUREX 15N solution with superior wetting and penetrating characteristics. This renders Class A fuels less combustible and allows the solution to penetrate past the char to control deep seated fires.
- Extended drain time provides longer surface wetting, reducing the risk of ignition/re-ignition.
- PLUREX 15N agent creates a foam blanket which provides an insulating barrier between the fuel and air.
- PLUREX 15N foam suppresses combustible vapors while cooling the fuel.

In addition, PLUREX 15N concentrate offers fire fighting protection characteristics:

- The brilliant white foam reflects heat.

- PLUREX 15N solution creates a dense foam blanket with excellent insulating properties.
- PLUREX 15N foam clings to vertical surfaces for structure protection.
- The wetting and penetrating characteristics of the PLUREX 15N solution reduce the combustibility of Class A fuels and makes water 5 times more effective.

Applicable extinguishment mechanisms and some properties of PLUREX 15N foam depend on the type of foam delivery device used. The solution does not destroy or retard new forest growth, will not harm fish or wildlife, is biodegradable in soils, aquatic ecosystems, and sewage treatment facilities and has no EPA reportable contents.

Application

PLUREX 15N concentrate is designed specifically for use on Class A fuel fires including wood, paper, coal and rubber. PLUREX 15N foam gives the fire fighter: extinguishment capabilities, exposure protection, and increased safety.

Although designed for Class A fires, PLUREX 15N foam can be effective on some Class B flammable liquid fires when applied from medium and high expansion devices.

PLUREX 15N solution can be used with aspirating and non-aspirating discharge devices, compressed air foam systems (CAFS) or dropped from fixed or rotary wing aircraft.



Foaming Properties – When used with fresh, sea or brackish water at the correct proportioning rate, the expansion will vary depending on the performance characteristics of the foam making equipment.

Proportioning – PLUREX 15N concentrate can be proportioned using most conventional proportioning equipment such as:

- Balanced pressure pump or bladder tank fixed sprinkler system
- In-line fixed or portable venturi type proportioners (Inductors)
- Fire trucks electronic dosing systems

Typical proportioning rates for common applications:

Wetting agent effect	0.1% to 0.4%
Fire retardant & fire extinguisher	0.5% to 1.0%
Air Aspirating Devices	0.2% to 1.0%
Non-Air Aspirating Devices	0.5% to 1.0%
Compressed Air Foam Systems (CAFS)	0.1% to 0.3%
Handline Nozzles	
KR-S2 Low Expansion	0.3% to 1.0%
KR-M2 Medium Expansion	0.3% to 1.0%
KR-S/M2 Dual Expansion	0.3% to 1.0%

Materials of construction compatibility

Tests have been performed with PLUREX 15N concentrate verifying its compatibility with the steel, stainless steel, brass, and aluminum alloys found in aerial and ground-based fire fighting equipment. PLUREX 15N is also compatible with standard fire fighter gear and hose material.

Storage and shelf life

When stored in the original packaging supplied (polyethylene drums or cans) or in equipment recommended by the manufacturer as part of the foam system and within the temperature limits specified, the shelf life of PLUREX 15N concentrate is normally about 20-25 years.

The recommended storage temperature for PLUREX 15N concentrate is 0 °C to +60 °C).

Safety and handling

See our corresponding "Material Safety data sheet".

Quality insurance

PLUREX 15N – as with all TYCO Products – is subject to a very stringent quality controls throughout all stages of production, from incoming raw to the complete product and is manufactured in an ISO 9001:2000 controlled facility. Quality assurance is therefore guaranteed.

Typical properties

PLUREX 15N	Class A foam agent
Fire Classes	A (and B)
Shape and color	Pale yellow, clear liquid
Density (20°C)	1,03±0.02 [g/ml]
pH (concentrate, 20°C)	7,0 ±0.5
Viscosity 20°C	20,0 ±4,0 [mm ² /s]
Admixing ratio	0.1 to 1 [% Vol.]
Surface tension Water	72 [dynes/cm.]
0.1% PLUREX 15N solution	37.01
0.6% PLUREX 15N solution	29.54
1.0% PLUREX 15N solution	28.60
Expansion Ratio (EN 1568-3)	≥ 9.0
Drain Time 25%, (20°C, EN 1568-3)	≥ 4:00 [min:s]
Drain Time 50%, (20°C, EN 1568-3)	≥ 7:00 [min:s]
Expansion	Low, Medium , High
Pour Point	≤ -3 [°C]
Recommended storage/Usage temperature	0 to +60 [°C]

Ordering information

PLUREX 15N can be supplied in cans, drums, totes or Bulk (contact us for Bulk delivery details).

Part No. F201337C2	20 Liter can
Part No. F201337C1	25 Liter can
Part No. F201337D1	200 Liter drum
Part No. F201337T1	1000 Liter tote