

PLUREX M Foam Concentrate

Description

PLUREX M High Expansion Foam Concentrate is a synthetic based formulation comprised of hydrocarbon surfactants, solvents, and stabilizers for use with low, medium and high expansion foam generators.

PLUREX M High Expansion Foam Concentrate can be used to produce foam with expansion ratios ranging from 50:1 to 1000:1 depending upon the type of generator and its operating pressure. When used with high expansion generators, recommended proportioning is at 3% (3 Litres PLUREX M concentrate with 97 litre water).

Performance

PLUREX M is measured against the latest specifications of the European Standard EN1568 : 2008 edition and marine IMO standard Msc 670. Testing on both standards have allowed rigorous testing with both fresh and salt water to meet the required performances.

The performance of PLUREX M foam concentrate when used at High-Expansion will vary depending upon the performance characteristics of the equipment. Expansion ratios through high expansion generators typically are between 200:1 and 1000:1. For this reason, it is important for the proper design of a high expansion system that the PLUREX M foam Concentrate be specifically tested with the foam generators. Medium expansion foam generators typically deliver expansion ratios between 50:1 and 200:1.

PLUREX M can be used by most conventional foam equipment such as:

- Balance pressure pump proportioning equipment
- Bladder tank and related proportioners
- Around-the-pump proportioners
- Fixed and portable In-line venturi type inductors
- Fixed or handline nozzles with fixed induction/pick up tubes



Application

PLUREX M High Expansion Foam Concentrate is a multi-purpose firefighting agent, used in fighting Class A, Class B, and LNG fires, both indoors and outdoors. It is used only with air aspirating foam discharge devices except when used as a wetting agent on Class A fuels.

PLUREX M High Expansion Foam Concentrate, when used with high expansion generators, is capable of totally flooding large rooms and enclosures allowing it to effectively suppress horizontal and vertical (three-dimensional) fires. High expansion foam is also effective in reducing vapour concentrations downwind from un-ignited LNG and other hazardous low boiling point gaseous products such as ammonia spills.

When used with medium expansion foam equipment, PLUREX M forms a foam blanket which prevents the release of fuel vapor and also provides additional cooling due to the higher water content. Medium expansion foam has benefits in outdoor applications because the foam is less affected by wind conditions.

PLUREX M is ideal for fixed high expansion systems such as warehouse total flooding protection pump rooms, LNG pits, Fire Brigades daily applications, and aircraft hangars.

The foam produced by PLUREX M extinguishes hydrocarbon fires best when applied gently by gentle application.



Approvals

The fire performance of PLUREX $\ensuremath{\mathsf{M}}$ is measured and listed according to:

- EN1568: 2018 Part 1 and 2
- IMO MSC Circ. 670 & MED



Storage and shelf life

PLUREX M has an operational temperature range of -8°C and +60°C. Limited exposure to temperatures above +60°C does not affect the firefighting performance.

When stored in the 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 M concentrate is about 20-25 years.

The factors affecting shelf life and stability for SKUM agents are discussed in detail in our Technical Bulletin 11B for storage recommendation.

If the product is frozen during storage or transportation, the concentrate should be thawed and used without any degeneration of the performance.

Eco-toxicology and disposal

PLUREX M is environmentally safe and rapidly biodegradable. PLUREX M does not contain any fluorosurfactant and is therefore considered as a fluorine free foam.

Safety and handling

See our corresponding "Material Safety data sheet".

Inspection

As with any fire extinguishing agent, PLUREX M should be inspected periodically. NFPA 11 or EN 13565-2 requires that foam concentrate samples be submitted to the manufacturer or other qualified laboratory for quality condition testing at least annually. Contact us for further information on annual inspection.

Quality assurance

PLUREX M is subject to stringent quality controls throughout production, from incoming raw materials inspection to finished product testing, and is manufactured in an ISO 14001 certified facility.

Typical Properties at 20° C

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PLUREX M	Multi-purpose Hi-ex foam 3%		
Fire Classes	A and B		
Shape and colour	Clear liquid, brown		
Smell	Characteristic, surfactant-alike		
Density (20°C)	1.06 ±0.02 [g/ml]		
pH (concentrate, 20°C)	7.0 ±1.0		
Viscosity 20°C	7.0 ±2.0 [mm ² /s]		
Sediment (EN-1568 / IMO)	≤ 0.1 [%]		
Admixing ratio	3 [% Vol.]		
Expansion	Medium Exp	High Exp	Low Exp
As per standard	EN 1568:1	EN 1568:2 IMO 670	EN 1568:3 IMO 1312
Expansion Ratio	≥ 120:1	≥ 800:1	≥ 9:1
Drain Time 25%	≥ 10:00 [min:s]	≥ 10:00 [min:s]	≥ 8:00 [min:s]
Drain Time 50%	NA	NA	≥ 15:00 [min:s]
Freezing Point	≤ -13 [°C]		
Pour Point	≤ -10 [°C]		
Recommended storage/ Usage temperature	-8 to +60 [°C]		

Ordering information

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

Part No.	Description
F203358C2	20 Litre can
F203358C1	25 Litre drum
F203358D1	200 Litre tote
F203358T1	1000 Litre drum
F203358B1	Bulk

Safety Data Sheets (SDS) are available at www.skum.com

Note: While NFF (also known as SFFF) agents may be compatible with existing AFFF and/or NFF hardware, system contamination from fluorinated agents may exist if hardware and piping is not replaced upon conversion to non-fluorinated agents.

Note: The converted metric values in this document are provided for dimensional reference only and do not reflect an actual measurement.

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