

## Multi purpose Freeze protected High Expansion foam concentrate to be proportioned at 3%

### Description

**PLUREX 3%** is a synthetic multipurpose foam concentrate based upon fatty alcohols, alkyl sulphates and butyl carbitol. Many fire tests during test programs have shown that it forms a stable foam blanket on burning non-polar solvents. It also forms a stable low, medium and high expansion foam which rapidly fills large spaces.

**PLUREX 3%** 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 or Medium Expansion Generators, recommended proportioning is at 3% (3 liter of **PLUREX 3%** with 97 liter water).

### Performance

The performance of **PLUREX 3%** 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 3%** foam Concentrate be specifically tested with the foam generators.

Medium expansion foam generators typically deliver expansion ratios between 50:1 and 200:1.

**PLUREX 3%** 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 3%** is a multi purpose firefighting agent, used in fighting Class A and Class B 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.

When used with high expansion generators, **PLUREX 3%** is capable of totally flooding large rooms and enclosures allowing it to effectively extinguish horizontal and vertical (three-dimensional) fires. High expansion foam is also effective in reducing vapor concentrations down wind from hazardous low boiling point gaseous products such as ammonia spills.

When used with medium expansion foam equipment, **PLUREX 3%** 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 3%** is ideal for fixed Medium and/or High expansion system, Fire brigades, Aircraft hangars.



The foam produced by **PLUREX 3%** extinguishes hydrocarbon fires best when applied indirectly.

**PLUREX 3%** is compatible with all foam-compatible dry chemical extinguishing powders.

Sea water can be used without an increase in the application rate.

### Approvals

**PLUREX 3%** is approved according to:  
GOST-R (Russia)

### Storage and shelf life

**PLUREX 3%** has an operational temperature range of -12° 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 3%** concentrate is about 20-25 years.

The factors affecting shelf life and stability for PLUREX Agents are discussed in detail in our Technical Bulletin 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 3%** is environmentally safe and rapidly biodegradable.

### Safety and handling

See our corresponding "Material Safety data sheet".

### Quality insurance

**PLUREX 3%** – 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

<b>PLUREX 3%</b>	Multi purpose Hi-ex foam
<b>Fire Classes</b>	A and B
<b>Shape and color</b>	Pale yellow clear liquid
<b>Smell</b>	Characteristic, surfactant-alike
<b>Density (20°C)</b>	1,04 ±0.02 [g/ml]
<b>pH (concentrate, 20°C)</b>	7,0 ±0.5
<b>Viscosity 20°C</b>	4 ±2 [mm <sup>2</sup> /s]
<b>Sediment (EN 1568)</b>	≤ 0,1 [%]
<b>Admixing ratio</b>	3 [% Vol.]
<b>Expansion Ratio (EN 1568-3)</b>	≥ 9,0
<b>Drain Time 25%, (20°C, EN 1568-3)</b>	≥ 8:00 [min:s]
<b>Drain Time 50%, (20°C, EN 1568-3)</b>	≥ 14:00 [min:s]
<b>Expansion</b>	Low, Medium , High
<b>Freezing Point</b>	≤ -17 [°C]
<b>Pour Point</b>	≤ -15 [°C]
<b>Recommended storage/Usage temperature</b>	-12 to +60 [°C]

### Ordering information

**PLUREX 3%** can be supplied in cans, drums, totes or Bulk (contact us for Bulk delivery details).

Part No. F203343C1	25 Liter can
Part No. F203343D1	200 Liter drum
Part No. F203343T1	1000 Liter tote
Part No. F203343B1	Bulk