

<b>Product name</b>	<b>JET-X 2% High Expansion Foam Concentrate</b>
<b>Description</b>	<b>Foam agent to FillFoam System</b>
<b>Manufacturer</b>	<b>ANSUL</b>
<b>Revision</b>	<b>1.0/2024</b>



## ASK ABOUT THE PRODUCT

### 1. Description

**JET-X 2% High-Expansion** Foam Concentrate contains hydrocarbon surfactants, solvents, and stabilizers for use with medium- and high-expansion foam generators. This synthetic foam concentrate is intended for firefighting applications at 2% solution. It must only be proportioned with **only fresh water**.

**JET-X 2%** foam solution 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. The foam blanket has excellent mobility and stability and utilizes several suppression mechanisms:

- Reduces free air movement required for combustion.
- Cools to a temperature below the combustion or auto ignition temperature and displaces oxygen as liquid drains from the foam and converts to steam.
- Penetrates Class A materials due to the reduced surface tension of the liquid draining from the foam.
- Insulates and blocks radiant heat feedback.

#### TYPICAL PHYSIOCHEMICAL PROPERTIES

Appearance	Blue liquid
Density	1.020 g/ml ± 0.010
pH	6.0 – 7.0
Refractive Index	1.380 ± 0.015
Viscosity*	110 ± 20 cPs at 77 °F (25 °C)
Viscosity*	290 ± 50 cPs at 35 °F (2 °C)

\*Brookfield viscometer, Spindle #2, Speed 60 rpm

### 2. Application

**JET-X 2% High-Expansion** Foam Concentrate is a tremendously flexible 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.

JET-X 2% Concentrate, when used with high-expansion generators, 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 downwind from unignited LNG and other hazardous low boiling point gaseous products such as ammonia spills.

When used with medium-expansion foam equipment, **JET-X 2%** Concentrate 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.

### 3. Approvals

JET-X 2% High-Expansion Foam Concentrate is designed in accordance with National Fire Protection Association (NFPA) Standard 11 for Low-, Medium-, and High-Expansion foam. The concentrate is approved, listed, qualified under, or meets the requirements of the following specifications and standards:

- **PZH Attestation no F.FT.60114.017.2022 (POLAND)**
- **Underwriters Laboratories (UL Standard 139)**
- **Factory Mutual (FM Approvals – FM5130)**
- **EN1568-2**
- **Safety data sheet for premix**



### 4. Foaming properties

The performance of **JET-X 2% High-Expansion** Foam Concentrate will vary depending upon the performance characteristics of the equipment. Expansion ratios through high-expansion generators are typically between 200:1 and 1000:1. For this reason, it is important for the proper design of a high-expansion system that the **JET-X 2% High-Expansion** Foam Concentrate be specifically listed with the foam generators. Refer to the performance table listing expansion ratios of JET-X high-expansion generators used in conjunction with **JET-X 2%** Foam Concentrate (see data sheet JET-X High-Expansion Foam Generator, Form No. F-93137, latest revision). Medium-expansion foam generators typically deliver expansion ratios between 50:1 and 200:1.



## 5. Proportioning

The recommended operational temperature range for **JET-X 2% High-Expansion** Foam Concentrate is 35 °F to 120 °F (2 °C to 49 °C). The temperature of the ready to use foam concentrate in the storage tank is **15 °C – 25°C**. This foam concentrate can be correctly proportioned using most conventional, properly calibrated, in-line proportioning equipment such as:

- Balanced and in-line balanced pressure pump proportioners.
- Balanced pressure bladder tank proportioners
- Around the pump type proportioners
- Fixed or portable in-line venturi (eductor) type proportioner

## 6. Storage and Handling

**JET-X 2% High-Expansion** Foam Concentrate should be stored in the original supplied package (HDPE totes, drums, or pails) or in the recommended foam system equipment as outlined in Tyco Fire Protection Products Technical Bulletin “Storage of Foam Concentrates”.

The concentrate should be maintained within the recommended operational temperature range. Freezing of the product should be avoided, and in case of freezing, a sample should be sent to **FOAMAX** to determine the physicochemical properties and performance parameters of the concentrate. Once the concentrate is frozen, the manufacturer does not guarantee the maintenance of the declared performance parameters.

Storage of **JET-X 2%** Concentrate as a pre-mix is not recommended.

Factors affecting the foam concentrate's long-term effectiveness include temperature exposure and cycling, storage container characteristics, air exposure, evaporation, dilution, and contamination. The effective life of **JET-X 2%** Concentrate can be maximized through optimal storage conditions and proper handling. **JET-X** foam concentrates have demonstrated effective firefighting performance with contents stored in the original package under proper conditions for more than 10 years.

Mixing **JET-X 2%** Concentrate with other high-expansion foam concentrates for long-term storage is not recommended. Different types of foam concentrates (e.g. AFFF or protein base) should not be mixed under any circumstances. **JET-X 2%** Concentrate should not be mixed for use with **JET-X 2 3/4%** Concentrate.

## 7. Materials of Construction Compatibility

To help avoid corrosion, galvanized pipe and fittings should never be used in contact with undiluted **JET-X 2% High-Expansion** Foam Concentrate. Refer to Tyco Fire Protection Products Technical Bulletin Acceptable Materials of Construction for recommendations and guidance regarding

compatibility of foam concentrate with common materials of construction in the firefighting foam industry.

## 8. Inspection

**JET-X 2% High-Expansion** Foam Concentrate should be inspected periodically in accordance with NFPA 11, EN 13565-2, or other relevant standard. A representative concentrate sample should be sent to **FOAMAX** quality analysis per the applicable standard. An annual inspection and sample analysis is typically sufficient unless the product has been exposed to unusual conditions.

Expansion ratios observed in lab tests may vary depending on the equipment and methods used by the testing laboratory.

For this reason, lab scale expansion ratios outside of the range typical of full scale equipment (200:1 to 1000:1) do not necessarily mean that a foam concentrate is not fit for purpose. If there are any questions about the viability of an **ANSUL**<sup>®</sup> High-Expansion Foam Concentrate sample, contact **FOAMAX**.

## 9. Quality Assurance

**JET-X 2% High-Expansion** Foam Concentrate is subject to stringent quality controls throughout production, from incoming raw materials inspection to finished product testing, and is manufactured in an ISO 9001:2008 certified facility.

## 10. Ordering information

Part No.	Description	Shipping Weight	Cube
<b>436879</b>	Pail 5 gal (19 L)	51 lb (23,1 kg)	1.08 ft3 (0.0305 m3)
<b>436881</b>	Drum 55 gal (208 L)	577 lb (261,7 kg)	11.33 ft3 (0.3208 m3)
<b>436883</b>	Tote 265 gal (1000 L)	2465 lb (1118 kg)	50.05 ft3 (1.42 m3)