



High Expansion Foams

- High expansion ratio for rapid filling of voluminous enclosed spaces
- Quick extinguishment
- Efficient vapour suppression
- Multi-purpose use at low and medium expansion ratios
- Lower water content for less material damage

Overview

High expansion (HI-EX) foam agents, also called detergent foams or multipurpose synthetic foams, are typically based upon fatty alcohols, alkyl sulphates and butyl carbitol. As the name suggests they expand at high ratios to quickly form voluminous foam for specific applications in extinguishing and vapour suppression.

Performance

HI-EX foam concentrate can be used to produce foam with expansion ratios ranging typically between 200:1 and 1000:1 depending upon the type of generator and the operating pressure.

For this reason, it is important, for the proper design of a high expansion system, that the concentrate be specifically tested with the intended foam generators.

Applications

When used with high expansion generators, HI-EX foam is capable of totally flooding large rooms and enclosures allowing it to effectively extinguish horizontal and vertical (three dimensional) fires whilst using less water. For this reason HI-EX foam is often used to extinguish fires in large buildings containing high value property such as aircraft hangars and distribution warehouses. The low water content means that water damage to property after extinguishment can be dramatically reduced in comparison to deluge systems.

High expansion foam is also effective in reducing vapor concentrations downwind from hazardous low boiling point gaseous products such as ammonia spills.

Many HI-EX foam agents can also be used by fire brigades as multipurpose foams (class A and B) at low and medium expansion ratios.



APPLICATIONS FOR HIGH EXPANSION AGENTS

- Aviation hangars
- Warehousing and storage facilities
- Marine
- Vapour suppression in chemical manufacturing and handling
- Municipal fire brigades

Usage

HI-EX foams can be used with most conventional foam equipment, these include:

- Balance pressure pump proportioning equipment
- Bladder tank and related proportioners
- Around-the-pump proportioners
- Fixed and portable in-line venturi type inductors
- Branchpipes with built-in induction systems
- Fixed and portable HI-EX foam generators

Approvals

SKUM is wholly committed to approving our agents to the latest industry standards. SKUM HI-EX agents are tested at internationally recognised test facilities and approved to the standards most appropriate to that industry, application and risk.

Varieties

Offering a wide choice of different concentrations, packaging capacities and approval types, SKUM manufactures HI-EX agents to address a wide range of applications at our proprietary manufacturing facility in Levate, Italy.

SKUM Foam solutions

As a brand 'SKUM' is synonymous with fire-fighting foam:- SKUM literally means Foam in Swedish.

From its foundation in Sweden in the 1930's SKUM has become the global standard of foamfire suppression in high-risk, high-stake industries.

SKUM offers a complete range of foam agent concentrates designed with performance, efficiency and environmental impact in mind. Products are tested at internationally recognised facilities and approved to the standards most appropriate to that industry, usage and risk.

As a manufacturer of both foam hardware and foam agents, SKUM is able to supply single component needs as well as complete end-to-end systems. An unrivalled history of fire suppression experience and a dedicated Foam Technical Service Team mean that SKUM is happy to address and confident to meet any customer fire-fighting foam requirement.