ANGUS FIRE

INTEGRITY
ANGUS FOAMS

Expandol LT

High Expansion (Hi-Ex) Foam Concentrate

Integrity

Doing what's right, rather than what's convenient

Angus Fire prides itself on the open and honest way in which we conduct our business throughout the world. Our foams are an extension of our ethical beliefs and we pride ourselves in being the responsible foam manufacturer, balancing high performance with minimal environmental impact. Our fluorine free foams are designed not to contain any fluorosurfactants, fluoropolymers, organohalogens, PFCAs, PFOA and no PFOS in accordance with EU Directive 2006/122/EC and amended Council Directive 76/769/EEC.

Balanced Chemical System

Every foam is designed and manufactured to work in the specific risk for which it is intended. High expansion foams are no exception and are manufactured with great care to ensure maximum performance. With an accurate balance of extinguishing compounds and being 100% biodegradable, these foams offer the highest performance against their intended risk.

- Superior Quality
- Environmental
- Reliable

Expandol LT is a superior quality high expansion fire fighting foam concentrate for extinguishing and securing flammable hydrocarbon liquid fires.

Its unique formulation is a blend of high activity synthetic foaming agents and foam stabilisers specially formulated to produce an extremely stable long-lasting foam. Expandol has been formulated primarily for use at medium and high expansion, and it is effective on a wide variety of Class A and Class B fire risks. The finished foam has drainage characteristics far superior to those of standard detergents which increase its ability to carry water to the fire, acting as a positive aid to effective fire extinguishment.

Expandol LT used at medium and high expansion combats fires in three ways:

- Initial contact with fire generates a large volume of steam reducing the available oxygen to create an inert atmosphere.
- The high water content of medium expansion foam produces a valuable cooling effect.
- The large volume of foam generated engulfs the area and totally seals off and extinguishes any remaining fires.

Expandol LT is extremely economical. For example, when used with the Hi-Combat Turbex Mk2 high expansion foam generator 200 m^3 min^{-1} (7000 ft^3 min^{-1}) of finished foam can be produced at an expansion of 1200:1 for a consumption rate of nominally 5 l min^{-1}.

Environment

Expandol LT is biodegradable and virtually non-toxic to aquatic organisms.

Applications

Expandol LT is the ideal foam to use at medium expansion at minor incidents such as small hydrocarbon liquid spill fires where close approach to the fire allows handheld apparatus to be used. It can also be used in conjunction with fixed installations to provide bund protection, where it can achieve extinction of fires or suppression of toxic vapour release after chemical spillage.

At medium and high expansion, Expandol LT is used for the total flooding of fire areas involving Class A and Class B fires: medium expansion for small areas such as cellars and basements of buildings, and high expansion for large areas such as ships' holds, machinery spaces, and LNG storage tank bunds. Medium and high expansion foams are most effective when dealing with outbreaks of fire in inaccessible locations, where direct application of conventional agents such as water is difficult or impossible due to smoke or restricted access.

Performance

The fire performance of Expandol LT is measured primarily against Lloyds Register NFPA 11.

Approvals

Expandol LT is approved.

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Equipment

Expandol LT is intended for use at 3% (high expansion) to 3 - 6% (medium expansion).

Expandol LT gives best results when used with the Angus Fire range of high and medium expansion foam-making equipment. It may also be used satisfactorily with other manufacturers' equipment.

Compatibility

Expandol LT is suitable for use in combination with:

- Soft or hard, fresh, brackish or sea water.
- Dry powder extinguishing agents either separately or as twin agent systems.
- Expanded protein-based or synthetic foams for application to a fire in sequence or simultaneously.

Storage

Expandol LT is exceptionally stable in long-term storage. A shelf-life of at least ten years may be expected if it is stored properly.

Disposal

For fire water runoff and accidental spillage please refer to Angus Fire's Foam Disposal Guide and MSDS for more information..

Reliability

Expandol LT is produced to rigorous quality control standards which ensure consistent fire performance and excellent product reliability.

Angus Fire operates a quality management system which complies with the requirements of BS EN ISO 9001.

Typical Physico-Chemical Properties		
Appearance		Clear Liquid
Specific gravity @ 20°C (68°F)		1.00 - 1.02
pH @ 20°C (68°F)		6.0 - 8.0
Viscosity @ 20°C (68°F)	$mm^2 sec^{-1}$	10
Maximum continuous storage temperature	°C (°F)	49 (120)
Maximum intermittent storage temperature	°C (°F)	60 (140)
Freezing point	°C (°F)	-13 (9)
Effect of freeze/thaw		No loss of performance
Lowest use temperature	°C (°F)	-13 (9)
Induction rate	%	2
Expansion ratio		≥ 500
25% drainage time	min/sec	≥ 5'00"

Typical Packing Specification					
	Plastic Square	Plastic Square	Plastic Cylindrical	Plastic Cylindrical	Ecobulk MX
Capacity	25 litres	5 US gallons	200 litres	55 US gallons	1000 litres
Empty weight (kg)	1.2	0.8	9.0	9.0	70
Filled weight (kg)	26	20	211	219	1080
Dimensions (mm)	448 x 286 x 286	402 x 293 x 240	580 D x 922 H	580 D x 922 H	1200 L x 1000 W x 1160 H
Part number	F0402G0P	F0402T0P	F0402J0P	F0402W0P	F0402L8

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EMERGENCY FOAM SERVICE Call +44 (0) 15242 61166 – 24 hours a day, every day

INTERNATIONAL SALES
Angus Fire Ltd
Angus House, Haddenham Business Park,
Pegasus Way, Haddenham, Aylesbury, HP17 8LB, UK
Tel: +44 (0)1844 293600 • Fax: +44 (0)1844 293664

UK SALES
Angus Fire Ltd
Station Road, Bentham, Lancaster, LA2 7NA, UK
Tel: +44 (0)1524 264000 • Fax: +44 (0)1524 261580

Email: general.enquiries@angusuk.co.uk • Web: www.angusfire.co.uk