

SILV-EX G Class A Foam Wetting Agent

Features

- 0, 1 to 1% on class A fires
- Environmentally friendly
- Freeze protected to -10°C
- For use with air aspirating and non-aspirating discharge devices
- Supplied ready to use in 20, 25, 200 or 1000 litres packaging

Description

SILV-EX G is a low, medium, and high expansion, Class A foam concentrate formulated from specialty hydrocarbon surfactants, stabilizers, corrosion inhibitors and solvents. This formulation provides extremely good cold weather performance. SILV-EX has been proven for decades to be effective on many deep seated Class A fires such as tyre fires, paper fires, coal fires, structure fires, and wild fires.

SILV-EX G foam concentrate can be proportioned from 0.1% to 1.0% in fresh, brackish or sea water. Due to its extremely low proportioning rate, SILV-EX G foam concentrate offers outstanding economy in: concentrate storage space, cost (compared to conventional 3% and 6% foaming agents) and water hauling requirement.

Example:

How much SILV-EX G concentrate is required to make 500 litres of foam solution?

- At 0.1% concentration:
 $500 \text{ L} \times 0.001 = 0.5 \text{ L}$ of concentrate
- At 0.6% concentration:
 $500 \text{ L} \times 0.006 = 3 \text{ L}$ of concentrate
- At 1.0% concentration:
 $500 \text{ L} \times 0.01 = 5 \text{ L}$ of concentrate



Performance

Fire extinguishment mechanisms in effect when using SILV-EX G "Class A" Fire Control Concentrate includes:

- Reduction of the surface tension of water, which provides the SILV-EX G solution with superior wetting and penetrating characteristics. This renders Class A fuels less combustible and allows the solution to penetrate past the char to control deep seated fires.
- Extended drain time provides longer surface wetting, reducing the risk of ignition/re-ignition.
- SILV-EX G agent creates a foam blanket which provides an insulating barrier between the fuel and air.
- SILV-EX G foam suppresses combustible vapours while cooling the fuel.

In addition, SILV-EX G concentrate ensures fire fighting protection characteristics:

- The brilliant white foam reflects heat.
- SILV-EX G solution creates a dense foam blanket with excellent insulating properties.
- SILV-EX G foam clings to vertical surfaces for structure protection.
- The wetting and penetrating characteristics of the SILV-EX G solution reduce the combustibility of Class A fuels and makes water 5 times more effective.

Applicable extinguishment mechanisms and some properties of SILV-EX G foam depend on the type of foam delivery device used. The solution does not destroy or retard new forest growth, will not harm fish or wildlife, is biodegradable in soils, aquatic ecosystems, and sewage treatment facilities and has no EPA reportable contents.

Application

SILV-EX G concentrate is designed specifically for use on Class A fuel fires including wood, paper, coal and rubber. SILV-EX G foam gives the fire fighter: extinguishment capabilities, exposure protection, and increased safety.

Although designed for Class A fires, SILV-EX G foam can be effective on some Class B flammable liquid fires when applied from medium and high expansion devices.

SILV-EX G solution can be used with air aspirating and non-aspirating discharge devices but also with compressed air foam systems (CAFS).

Foaming Properties – When used with fresh, sea or brackish water at the correct proportioning rate, the expansion will vary depending on the performance characteristics of the foam making equipment.

Proportioning – SILV-EX G concentrate can be proportioned using most conventional proportioning equipment such as:

- Balanced pressure pump or bladder tank fixed sprinkler system
- In-line fixed or portable venturi type proportioners (Inductors)
- Flow-Mix™ Model 500 foam proportioner
- Fire trucks electronics dosing systems

Typical proportioning rates for common applications:

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|--------------------------------------|--------------|
| ■ Air Aspirating Devices | 0.2% to 1.0% |
| ■ Non-Air Aspirating Devices | 0.5% to 1.0% |
| ■ Compressed Air Foam Systems (CAFS) | 0.1% to 0.3% |

Handline Nozzles

- | | |
|--------------------------|--------------|
| ■ KR-S2 Low Expansion | 0.3% to 1.0% |
| ■ KR-M2 Medium Expansion | 0.3% to 1.0% |
| ■ KR-S/M2 Dual Expansion | 0.3% to 1.0% |

Approvals

The fire performance of SILV-EX G is measured and listed according to:

- DIN - EN2
- Tyre industry intensive testing including sprinklers

Storage and Shelf Life

SILV-EX G has an operational temperature range of -7°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 SILV-EX G Concentrate is about 20-25 years.

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

For more information regarding specific guidelines about SILV-EX G, please email info@skum.com

Safety and Handling

See our corresponding “Material Safety data sheet”.

Materials of Construction Compatibility

Tests have been performed with SILV-EX G concentrate verifying its compatibility with the steel, stainless steel, brass, and aluminum aluminium alloys found in fire fighting equipment. SILV-EX G is also compatible with standard fire fighter gear and hose material.

Quality Assurance

SILV-EX G – as with all TYCO Products is subject to very stringent quality controls throughout all stages of production, from incoming raw to the complete product and is manufactured in an ISO 9001:2008 controlled facility. Quality assurance is therefore guaranteed.

Typical Properties at 20°C

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|--|--------------------------------|
| ■ SILV-EX G | Class A foam agent |
| ■ Fire Classes | A (and B) |
| ■ Shape and colour | Pale yellow, clear liquid |
| ■ Density (20°C) | 1.01±0.01 [g/ml] |
| ■ pH (concentrate, 20°C) | 7.0 ±0.5 |
| ■ Viscosity 20°C | 13.0 ±2.0 [mm ² /s] |
| ■ Admixing ratio | 0.1 to 1 [% Vol.] |
| ■ Surface tension Water | 66 to 76 [dynes/cm.] |
| 0.1% SILV-EX G solution | 25.00 |
| 0.6% SILV-EX G solution | 24.50 |
| 1.0% SILV-EX G solution | 24.40 |
| ■ Expansion Ratio (EN 1568-3) | ≥ 8.0 |
| ■ Drain Time 25%, (20°C, EN 1568-3) | ≥ 5:00 [min:s] |
| ■ Drain Time 50%, (20°C, EN 1568-3) | ≥ 8:00 [min:s] |
| ■ Expansion | Low, Medium, High |
| ■ Pour Point | ≤ -10 [°C] |
| ■ Recommended storage/ Usage temperature | -7 to +60 [°C] |

Ordering Information

SILV-EX G can be supplied in cans, drums or totes.

<u>Part No.</u>	<u>Description</u>
■ F201132C2	20 Litre can
■ F201132C1	25 Litre can
■ F201132D1	200 Litre drum
■ F201132T1	1000 Litre tote