

## SOLBERG® VERSAGARD™ AS-100

### MULTIPURPOSE 3x3 FLUORINE-FREE FOAM CONCENTRATE



#### FAST FACTS

- Next-Generation 3x3 Fluorine-Free Alcohol Resistant (AR) concentrate
- GreenScreen Certified Silver®
- EN-1568:2018
- UL 162 Listed
- ICAO Level B
- LASTFIRE (Good/Good/Good)
- IMO MSC.1/Circ. 1312 certification
- Biodegradable and non-persistent
- Fresh, salt & brackish water compatible
- Fast knockdown & extinguishing performance
- Excellent burnback performance
- No increase in viscosity upon contact with water
- Compatible with multiple equipment systems
- Contains no siloxanes



#### DESCRIPTION

**SOLBERG® VERSAGARD™ AS-100** (patent pending) multipurpose 3x3 fluorine-free foam concentrate is a state-of-the-art AR fluorine-free pseudoplastic foam technology. Non-persistent, siloxane-free, with no intentionally added PFAS chemicals, SOLBERG VERSAGARD AS-100 is designed for extinguishing and securing both Class B (hydrocarbon fuel and polar solvent fuel) and deep-seated Class A fires. SOLBERG VERSAGARD AS-100 is a combination of hydrocarbon surfactants and additives producing excellent foam expansion, product stability, vapour sealing, extinguishment and burnback properties for both shallow and fuel in-depth fires, using fresh, sea or brackish water. This fluorine-free concentrate has been engineered to produce a stable and long-draining foam blanket, whilst ensuring a concentrate with no significant viscosity change in presence of water and with improved storage, handling, proportioning and long-term stability.

#### APPLICATIONS

SOLBERG VERSAGARD AS-100 is designed to generate stable foams with high fluidity and slow drainage. This novel technology allows SOLBERG VERSAGARD to perform similarly to fluorinated products. It may be used with low-expansion foam equipment (nozzles and monitors) and medium & high-expansion foam discharge devices to fight fires involving Class B hydrocarbon and polar solvent fuel fires. It is fully compatible and easily proportioned with standard firefighting equipment, including in-line inductors, self-inducting nozzles, fire truck pumps, bladder tanks, pump skids, balanced pressure systems and more.

In addition to its excellent foamability and bubble stability, SOLBERG VERSAGARD AS-100 has excellent wetting ability making it an effective tool for the extinguishment of Class A fuel fires.

#### CERTIFICATIONS

SOLBERG VERSAGARD AS-100 has been the subject of multiple large-scale fire testing programs. Results include:

- Achieved the maximum rating and certified in European Standard EN-1568:2018 part 3 & 4 on all fuels with fresh and sea water – IA/IA - IA/IA
- Passed and certified to European Standard EN-1568:2018 part 1 & 2 – for use with medium- and high-expansion foam discharge devices
- UL 162 Listed
- International Maritime Organization certification MSC.1/Circ. 1312
- LASTFIRE batch-certified as GOOD/GOOD/GOOD with 3 nozzles (semi, asp, system)
- Tested and certified to ICAO Level B – high performance on aviation fuels with both fresh and sea water
- GESIP Listed/Qualified at lowest application rates on Hydrocarbon and Methanol/Alcohols (Water Miscible) Fuels.
- GreenScreen Certified Silver®

**SOLBERG VERSAGARD AS-100 is**  
**GreenScreen Certified®**  
at the Silver Level.



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### USAGE RATE

The proportioning rate is 3% for both hydrocarbons and polar solvents. It is used at 1% on Class A fuel fires.

| TYPICAL PROPERTIES                     |               |
|--|---------------|
| Specific Gravity, g/cm <sup>3</sup>    | 1.010 - 1.050 |
| pH @ 20°C                              | 6.0 - 8.0     |
| *Viscosity, mPa.s/cPs at 375s-1 @ 20°C | ≤160          |
| †Viscosity, mPa.s/cPs, 20°C            |               |
| Viscosity (#4 @ 30 rpm)                | 2900 - 3500   |
| Viscosity (#4 @ 60 rpm)                | 1700 - 2050   |
| Freezing Point, °C                     | -5°C          |
| Lowest Temperature for Use, °C         | 0°C           |

\* Brookfield cone/plate

† Brookfield LVT

| FOAM PROPERTIES                                      |      |
|--|------|
| Dilution Rate  | 3%   |
| Surface tens. at 20°C, mN/m<br>(Demineralised water) | <25  |
| Interfacial tens. with cyclohexane at<br>20°C, mN/m  | 5.2  |
| Low Expansion Foam (UNI-86)                          |      |
| Foam Expansion Index                                 | >6.5 |

### INSPECTION

SOLBERG VERSAGARD AS-100 or a premix solution should be tested annually per National Fire protection Association (NFPA 11) and EN-13565-2 standards. A sample of the foam concentrate should be sent to the manufacturer or qualified third party lab to confirm physical properties and foam quality meet the specifications of the foam as originally supplied as per the requirements of NFPA 11 and EN-13565-2.

### PACKAGING

The product is supplied in 20 or 25 L PE prismatic containers, 200 L PE cylindrical drums and, 1,000 L IBC containers.

### STORAGE/MATERIAL COMPATIBILITY

SOLBERG VERSAGARD AS-100 should be stored between 0°C and +50°C, preferably in the original containers. It is compatible with multiple materials of construction found in firefighting equipment. For questions about material of construction compatibility consult Perimeter Solutions technical services.

The shelf life of any foam concentrate is maximized by proper storage conditions and maintenance. Factors affecting shelf life are wide temperature fluctuation, evaporation, dilution, and contamination by foreign materials. When stored in original containers or in manufacturer-recommended equipment and within the specified temperature range SOLBERG foam concentrates have demonstrated effective firefighting performance of 10 years or greater.

### ⚠ CAUTIONS

Foams should not be used in contact with electrical equipment or with chemical products that can react with water. It is recommended to avoid contact of the foam concentrate with skin. In case of eye splashes, wash with plenty of water. In case of ingestion do not induce vomiting, drink water and seek medical advice.

Contains no intentionally added PFAS.



## Solutions That Save.

#### FOR MORE INFORMATION

Contact any of our worldwide Perimeter Solutions Fire Safety offices or visit:  
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