

# SOLBERG® AVIGARD™

## ICAO LEVEL “B” CERTIFIED FLUORINE-FREE FOAM CONCENTRATES



### FAST FACTS

- Breakthrough fluorine-free formulation for the aviation market
- Fresh & salt water compatible
- No PBT profile
- Newtonian (low viscosity) flow characteristics
- Fast knockdown & extinguishing performance
- Excellent burnback and vapour suppression performance
- Environmentally responsible and readily biodegradable
- Lower disposal costs
- Compatible with ARFF equipment

### APPLICATIONS

The SOLBERG AVIGARD line features a special formulation designed to meet or exceed ICAO regulations with excellent performance on Jet A/Jet A1 fuel – with high fluidity and slow drainage. They may be used with low expansion foam equipment (nozzles and monitors) and medium expansion foam devices to fight fires involving Class B hydrocarbon fuel fires.

### USAGE RATE

The proportioning rate is either 3% or 6%. SOLBERG AVIGARD is also certified for sea water.

### DESCRIPTION

SOLBERG® AVIGARD™ Fluorine-Free Foam Concentrates are a state-of-the-art fluorine-free, low viscosity aviation foam technology designed for extinguishing and securing flammable aviation fuel spills and fires (Jet A and Jet A1). A special combination of hydrocarbon surfactants and additives delivers excellent foaming, extinguishment and burnback properties to firefighting foams using either fresh water or sea water. SOLBERG AVIGARD foam concentrates contain no added PFAS chemicals and can be considered as readily and rapidly biodegradable.



### SPECIFICATIONS

TYPICAL PROPERTIES	3B	6B
Specific gravity @ 20°C	1.09 ± 0.02	1.05 ± 0.02
pH @ 20°C	7.5 ± 0.5	7.5 ± 0.5
Viscosity, mPa.s		
@ 20°C	< 30	< 10
@ 0°C	45	20
Freezing point, °C	-8°C	-3°C
Lowest temperature for use, °C	-5°C	0°C

FOAM PROPERTIES	3B	6B
Dilution rate	3%	6%
Surface tens. at 20°C, mN/m (Demineralised water)	<25	<25
Low expansion foam (UNI-86)		
Foam expansion index	>8.0	>8.0
25% Drainage time, mins	>3:00	>3:00

**PACKAGING**

<b>Pail</b>	<b>20 L / 5 Gal</b>
<b>Drum</b>	<b>200 L / 55 Gal</b>
<b>IBC</b>	<b>1000 L / 265 Gal</b>

**STORAGE**

The concentrate should be stored preferably in the original containers or in stainless steel or epoxy lined tanks. Avoid permanent contact with carbon steel, iron, copper alloys, or aluminum. Do not mix with other foam concentrates without a previous verification of compatibility. When stored in original containers or in manufacturer recommended equipment and within specified temperature range, the shelf life of the product is rated to exceed 20 years.

**ENVIRONMENTAL**

SOLBERG AVIGARD products contain no fluorosurfactants, fluoropolymers, organohalogens, PFCAs, PFOA and no PFOS in accordance with EU Directive 2006/122/EC and amended by Council Directive 76/769/EEC. They present no concern for persistence, bioaccumulation or toxic breakdown (PBTs).

**CAUTIONS**

It is recommended to avoid the contact of the foam concentrate with the 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.

**PERFORMANCE**

SOLBERG AVIGARD has approval certification according to International Civil Aviation Organization (ICAO) Airport Service Manual (DOC 9137-AN/898) Part 1 - Rescue and Firefighting, Level B.

<b>SOLBERG AVIGARD 3B</b>			
<b>Standard</b>	<b>ICAO B Standard</b>	<b>Fresh Water</b>	<b>Sea Water</b>
<b>Fuel</b>		<b>Jet A1</b>	<b>Jet A1</b>
<b>Application</b>		<b>Forceful</b>	<b>Forceful</b>
<b>Dilution rate, %</b>		<b>3</b>	<b>3</b>
<b>Extinguishment time, mins.</b>	<b>&lt; 2:00</b>	<b>1:05</b>	<b>0:48</b>
<b>Burnback time, mins.</b>	<b>&gt; 5:00</b>	<b>9:05</b>	<b>6:10</b>

<b>SOLBERG AVIGARD 6B</b>			
<b>Standard</b>	<b>ICAO B Standard</b>	<b>Fresh Water</b>	<b>Sea Water</b>
<b>Fuel</b>		<b>Jet A1</b>	<b>Jet A1</b>
<b>Application</b>		<b>Forceful</b>	<b>Forceful</b>
<b>Dilution rate, %</b>		<b>6</b>	<b>6</b>
<b>Extinguishment time, mins.</b>	<b>&lt; 2:00</b>	<b>1:23</b>	<b>1:26</b>
<b>Burnback time, mins.</b>	<b>&gt; 5:00</b>	<b>7:45</b>	<b>6:13</b>



**Solutions That Save.**

**FOR MORE INFORMATION**

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