

# PHOS-CHEK® 3% MS

## AFFF MIL-SPEC AQUEOUS FILM FORMING FOAM CONCENTRATE



### DESCRIPTION

**PHOS-CHEK® 3% AFFF MIL-SPEC** film forming foam concentrate was the first all C6 based product on the Department of Defense Qualified Product Database (QPD) – Qualified Products List (QPL). In 2016, PHOS-CHEK 3% AFFF MIL-SPEC was selected by the US Air Force as the product of choice on all of their Aircraft Rescue Firefighting trucks globally. The MIL-SPEC testing protocol is the most rigorous test program for foam concentrates. The foams must pass multiple fire tests and confirm performance when diluted with both fresh and sea water. Fire performance is confirmed in both 2.6m<sup>2</sup> and 4.6m<sup>2</sup> unleaded gasoline pool fires at half strength and five times concentration. Other requirements include chemical and physical property specifications, foam quality (expansion and drain time), film formation, and sealability tests. The MIL-SPEC test protocol also includes extensive environmental impact based on biodegradability studies like Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), and aquatic toxicity.

### APPLICATIONS

**PHOS-CHEK 3% AFFF MIL-SPEC** may be used with low expansion foam equipment (nozzles and monitors), non-aspirating devices (water spray nozzles and standard sprinklers) and medium expansion foam devices to fight fires involving Class B hydrocarbon fuel fires such as aviation fuels, hydraulic oil, and diesel fuels. It is not suitable for use on polar solvents or water miscible fuels such as alcohols, ketones, esters, and ethers.

### APPROVAL CERTIFICATIONS

DOD Spec MIL-PRF-24385 QPD Approved, UL 162 Listed.



### TYPICAL PHYSICAL PROPERTIES

<b>Specific gravity @ 68 °F (20 °C)</b>	<b>1.002 – 1.042</b>
<b>pH</b>	<b>8.1 ± 0.5</b>
<b>Viscosity (LV-1 Spindle @ 60 RPM)*</b>	<b>2 – 10 cP</b>
<b>Refractive Index</b>	<b>1.3650 – 1.3750</b>
<b>Lowest Temperature for Use</b>	<b>35 °F (1.7 °C)</b>
<b>Freezing Point</b>	<b>24.8 °F (-4 °C)</b>

\*Brookfield LVT

### SHELF LIFE, INSPECTION AND TESTING

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. Properly stored PHOS-CHEK AFFF Class B foam concentrates should have no significant loss of firefighting performance for 20+ years. However, the National Fire Protection Association (NFPA) recommends annual testing of all firefighting foams.

**STORAGE AND HANDLING**

The concentrate should be stored at temperatures between 35 °F (1.7 °C) and 120 °F (49 °C), preferably in the original containers, approved bladder tanks, stainless steel, high density polyethylene, fiberglass or epoxy lined tanks. Concentrate piping acceptable materials of construction include stainless steel (either 304 or 316), some plastic piping including fiberglass and PVC, red brass, and black iron as long as the system is completely flooded eliminating the air/foam concentrate/carbon steel interface. Avoid permanent contact with carbon steel, iron, some copper alloys, & aluminum when the piping material and concentrate will be exposed to air. Galvanized piping should not be used in direct contact with the foam concentrate.

Foam concentrates are subject to evaporation, which accelerates when the product is exposed to air. Storage tanks should be sealed and fitted with a pressure vacuum vent to prevent free exchange of air.



**HANDLING PRECAUTIONS**

- For DETAILED SAFETY INFORMATION, please refer to the SDS.
- **Precautionary Measures:** Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary contact and removal of the material from the eyes, skin and clothing.
- **Eye Protection:** As a good industrial practice, the use of chemical goggles is recommended.
- **If in the eyes:** Flush with plenty of water.
- **Skin Protection:** Wear protective gloves when handling concentrate to minimize skin contact. Wash hands and contaminated skin after handling.
- **Respiratory Protection:** None required.
- For complete SDS, visit [perimeter-solutions.com](http://perimeter-solutions.com)

**PACKAGING**

**ORDERING INFORMATION**

PHOS-CHEK 3% AFFF MIL-SPEC	lb.*	kg.*	Part #
<b>5 gallon pail (20 litres), PHOS-CHEK 3% AFFF MIL-SPEC NSN 4210-01-668-6235</b>	<b>43</b>	<b>19</b>	<b>10004164</b>
<b>55 gallon drum (200 litres), PHOS-CHEK 3% AFFF MIL-SPEC NSN 4210-01-668-6228</b>	<b>468</b>	<b>212</b>	<b>10004112</b>
<b>265 gallon tote (1,000 litres), PHOS-CHEK 3% AFFF MIL-SPEC</b>	<b>2255</b>	<b>1023</b>	<b>10004192</b>

\*Approximate shipping weight

Contact your local authorized PHOS-CHEK distributor or factory sales representative for additional details. [perimeter-solutions.com](http://perimeter-solutions.com)



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**FOR MORE INFORMATION**

Contact any of our worldwide Perimeter Solutions Fire Safety offices or visit:  
[www.Perimeter-Solutions.com](http://www.Perimeter-Solutions.com)

**UNITED STATES**

1520 Brookfield Avenue  
Green Bay, WI 54313  
Tel: +1 800 682 3626  
Tel: +1 920 593 9445  
[salesfoamusa@perimeter-solutions.com](mailto:salesfoamusa@perimeter-solutions.com)

**EMEA**

Polígono de Baiña, Parcela 23  
33682 Mieres (Asturias)  
Spain  
Tel: +34 985 24 29 45  
[salesfoamea@perimeter-solutions.com](mailto:salesfoamea@perimeter-solutions.com)

**ASIA PACIFIC**

3 Charles Street  
St Marys NSW 2760 – Australia  
Tel: +61 2 9673 5300  
[salesfoamapac@perimeter-solutions.com](mailto:salesfoamapac@perimeter-solutions.com)

[perimeter-solutions.com](http://perimeter-solutions.com)

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