

# PHOS-CHEK® 6% MS

## AFFF MIL-SPEC AQUEOUS FILM FORMING FOAM CONCENTRATE



### DESCRIPTION

**PHOS-CHEK® 6% AFFF MIL-SPEC** foam concentrate is a C6 based product on the Department of Defense Qualified Product Database (QPD) – Qualified Products List (QPL). The most common use for PHOS-CHEK 6% AFFF MIL-SPEC foam is by the US Navy. 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 requires a determination of environmental impact based on biodegradability studies like Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), and aquatic toxicity.

### APPLICATIONS

PHOS-CHEK 6% 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>1.030 -1.070</b>
<b>pH</b>	<b>8.0 ± 0.5</b>
<b>Viscosity (LV-1 Spindle @ 60 RPM)*</b>	<b>2-10 cP</b>
<b>Refractive Index</b>	<b>1.3600 - 1.3700</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

### 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.

**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.

**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 6% AFFF MIL-SPEC	lb.*	kg.*	Part #
<b>5 Gallon Pail (20 litres)</b>	<b>43</b>	<b>19</b>	<b>10004745</b>
<b>55 Gallon Drum (200 litres)</b>	<b>468</b>	<b>212</b>	<b>10004744</b>
<b>265 Gallon Tote (1,000 litres)</b>	<b>2255</b>	<b>1023</b>	<b>10004686</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**  
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