



September 5<sup>th</sup>, 2022

## Long-Term Retardant for Wildland Fire Management

**Qualified by US Forest Service in Accordance with Forest Service Specification 5100-304d**

**These products are evaluated, qualified, and approved for use only at the specified mix ratio with the indicated application equipment.**

Consult individual agencies for specific policies relating to long-term retardant use.

Definition: Retardants contain salts that decrease fire intensity and slow advance of the fire, even after the water they contain evaporates.

Chemical	Mix Ratio  (Pounds concentrate per gallon water)	Qualified Applications <sup>1</sup>				Ground Applied
		Fixed-Wing <sup>3</sup>		Helicopter		
		Multi Engine	SEATS	Fixed-Tank	Bucket	
<b>Dry Concentrate - Gum-thickened; Permanent or Temporary Base</b>						
Phos-Chek MVP-Fx	0.96 lb/gal	●	●	-	●	●
Phos-Chek MVP-F	0.95 lb/gal	●	●	-	●	●
Fortress FR-100	1.68 lb/gal	○	○	-	○	●
Fortress FR-105M	1.68 lb/gal	○	○	-	○	●
<b>Dry Concentrate - Gum-thickened; Temporary Base</b>						
Phos-Chek 259-Fx	1.01 lb/gal	●	●	●	●	●
<b>Wet Concentrate - Gum-thickened; Permanent or Temporary Base</b>						
Phos-Chek LC-95A-R	5.5:1	●	●	-	●	●
Phos-Chek LC-95A-Fx	5.5:1	●	●	-	●	●
Phos-Chek LC-95A-F	5.5:1	●	●	-	●	●
Phos-Chek LCE20-Fx	5.2:1	●	●	-	●	●
Fortress FR-200	2.4:1	○	○	-	○	●
<b>Wet Concentrate - Gum-thickened; Temporary Base</b>						
Phos-Chek LC-95-W	5.5:1	●	●	-	●	●

1 – Qualification Notes

- Fully Qualified – Product complies with all requirements of a formal specification.
- Conditionally Qualified – Product complies with all requirements in the specification for laboratory evaluation; a field evaluation is required for full qualification.
- Δ Interim Qualified – Product complies with all interim requirements in Appendix A of the specification; final results and a field evaluation is required for full qualification.

2 – Pretreatment category has not been evaluated for durability and weathering.

3 – **CAUTION: When switching between Fortress and Phos-Chek products, rinsing the tank and outside of the airtanker is required. Cross-mixing of these products may increase maintenance time and cleaning.**



September 5<sup>th</sup>, 2022

## Long-Term Retardant for Wildland Fire Management - Pretreatment

### Qualified by US Forest Service in Accordance with Forest Service Specification 5100-304d

**These products are evaluated, qualified, and approved for use only at the specified mix ratio with the indicated application equipment.**

Consult individual agencies for specific policies relating to long-term retardant use.

Definition: Retardants contain salts that decrease fire intensity and slow advance of the fire, even after the water they contain evaporates.

Chemical	Mix Ratio  (Gallons of water per gallon Concentrate)	Qualified Applications <sup>1</sup>				Ground Applied
		Fixed-Wing		Helicopter		
		Multi Engine	SEATS	Fixed-Tank	Bucket	
<b>Pretreatment, Non Storable<sup>2</sup></b>						
Phos-Chek LC-95-W	5.5:1	-	-	-	-	●
Phos-Chek LC-95A-Fx	5.5:1	-	-	-	-	●
Phos-Chek Fortify	4	-	-	-	-	●
Phos-Chek LCE20W	4	-	-	-	-	●
Fortress FR-600	4	-	-	-	-	●
Komodo	4	-	-	-	-	●
Fortress FR-100	1.68 lb/gal	-	-	-	-	●
Fortress FR-200	2.4:1	-	-	-	-	●
Fortress FR-105M	1.68 lb/gal	-	-	-	-	●

**1 – Qualification Notes**

- Fully Qualified – Product complies with all requirements of a formal specification.
- Conditionally Qualified – Product complies with all requirements in the specification for laboratory evaluation; a field evaluation is required for full qualification.
- Δ Interim Qualified – Product complies with all interim requirements in Appendix A of the specification; final results and a field evaluation is required for full qualification.
- Not qualified for this application.

2 – Pretreatment category has not been evaluated for durability and weathering.

**3 – CAUTION: When switching between products from different manufacturers, rinsing the tank is required. Cross-mixing of these products may increase maintenance time and cleaning.**

4 – These products are designed to be delivered pre-mixed and ready-to-use as pretreatment chemicals. No mixing shall take place after purchase.