February 2026

Long-Term Fire Retardant Characteristics and Mix Factors[1]

Retardant [2]	Approved Applications [3]	Mix Ratio	Mixed Retardant Prepared Per Ton	Specific Weight of Mixed Retardant	Viscosity of Mixed Retardant	Marsh Funnel Flow-Through Time of Mixed Retardant	Refractometer Reading of Mixed Retardant	Density of Mixed Retardant
Product Name[5]	*Per FS QPL*	*concentrate to water*	*gallons*	*pounds/gallon*	*centipoise*	*seconds*	*scale reading*	*g/mL*
Dry Concentrate, Gum-thickened, High and Medium Viscosity (Use large-tip, 17/64" diameter, Marsh Funnel for flow-through time.)							**REQUIRED**	**REFERENCE**
Phos-Chek MVP-Fx	FW, SEAT, HB, G	0.96 lb to 1 gal H_2O	2209	8.79	401 - 800	16 - 22	8.0 - 9.75	1.048 - 1.059
Phos-Chek MVP-F	FW, SEAT, HB, G	0.95 lb to 1 gal H_2O	2224	8.78	401 - 800	16 - 22	8.25 - 10.0	1.051 - 1.064
Dry Concentrate, Gum-thickened, Low Viscosity (Use small-tip, 3/16" diameter, Marsh Funnel to determine flow-through time.)							**REQUIRED**	**REFERENCE**
Phos-Chek 259-Fx	FW, SEAT, HF, HB, G	1.01 lb to 1 gal H_2O	2105	8.82	150 - 400	29-44	9.75 - 11.75	1.051 - 1.063
Phos-Chek 259-F	FW, SEAT, HF, HB, G	1.14 lb to 1 gal H_2O	1856	8.95	150 - 400	39-61	12.25 - 14.5	1.066 - 1.079
Wet Concentrate, Gum-thickened, Low-Viscosity (Use small-tip, 3/16" diameter, Marsh Funnel to determine flow-through time.)							**REQUIRED**	**REFERENCE**
Phos-Chek LC-95A-R	FW, SEAT, HB, G	5.5:1 (5.5 part H_2O to 1 part Concentrate)	1054	9.00	150 - 400	33 - 49	12.0 - 14.5	1.071 - 1.087
Phos-Chek LC-95A-Fx	FW, SEAT, HB, G	5.5:1 (5.5 part H_2O to 1 part Concentrate)	1053	9.01	150 - 400	32 - 50	11.5 - 14.0	1.071 - 1.088
Phos-Chek LC-95A-F	FW, SEAT, HB, G	5.5:1 (5.5 part H_2O to 1 part Concentrate)	1050	9.00	150 - 400	32 - 50	11.5 - 14.0	1.070 - 1.086
Phos-Chek LCE20-Fx	FW, SEAT, HB, G	5.2:1 (5.2 part H_2O to 1 part Concentrate)	1113	8.87	150 – 400	32 - 40	9.75 – 12.0	1.056 – 1.069
Phos-Chek LC-95-W	FW, SEAT, HB, G	5.5:1 (5.5 part H_2O to 1 part Concentrate)	1050	8.99	150 - 400	34 - 52	11.75 - 14.0	1.069 - 1.085

1. The listed products are evaluated, qualified for use only at the specified mix ratio with the indicated application equipment.
2. Based on Forest Service Qualified Products List (QPL). Consult individual agencies for specific policies relating to long-term retardant use. Data from all approved variations (formulations) of each product were used in the preparation of the information in this table.
3. FW - Fixed-Wing Airtanker, SEAT – Single Engine Airtanker, HF - Fixed-Tank Helicopter; HB- Helicopter Bucket; G - Ground Engine.