

## CHAMPION DIESEL FLO K

**COLD FLOW IMPROVER** 

Ultra low sulfur diesel (ULSD) and Bio-diesel (B5 – B20) fuels, coupled with frigid temperatures and high levels of emulsified water, are the reasons users report fuel gelling. When the temperature drops below the cloud point of the fuel it causes operating difficulties due to wax dropout. Wax crystals, which are 50 to 250 microns in diameter, form blocking fuel lines and filters. Highly aromatic components can be used to correct this problem, but their use must be limited because they decrease cetane value and also tend to be more unstable. Fuel marketers blending kerosene or grade No.1-D diesel into their 2-D diesel to "winterize" the fuel decrease the BTU value and fuel lubricity and need to charge a higher price.

**4294 - Champion**<sup>®</sup> **Diesel Flo K** multifunctional diesel fuel additive boosts performance in the key areas of injector detergency, fuel economy, smoke reduction, fuel lubricity, fuel stability, corrosion protection and cold flow improvement when used in ultra low sulfur diesel (ULSD) and Bio-diesel (B5 – B20) fuels. Wax crystals will tend to settle to the bottom of the tank leading to inconsistent fuel quality and field problems associated with the wax enriched lower portion of the tank. Treated the fuel with our Wax Anti-Settling Additive (WASA) can reduce the size of the wax crystals to the extent that wax settling is significantly slower or is halted completely.

## **Benefits**

- ☑ Ultra Low Sulfur Diesel (ULSD) Compliant contains less than 15 parts per million (ppm) sulfur
- Reduce, or stop, gelling in fuel blocking fuel filters and lines
- Add lubricity to low-sulfur diesel fuel
- ☑ Contains anti-icing additive handling up to 220 PPM of water permitting fuel to flow
- Restore power by cleaning injectors and reducing carbon and varnish build-up
- Promote better fuel mileage and better economics over mixing #2 fuel with #1
- Contains no metals, halogens, sulfur or other ingredients harmful to diesel engines
- □ Completely organic and ash-free

## **Directions**

Champion<sup>®</sup> Diesel Flo K must be added to the fuel tank before filling up to facilitate mixing. When adding For Champion<sup>®</sup> Diesel Flo K must be added to fuel at least 9°F above its cloud point and allowed to flow through fuel lines and filters for best results. It will not de-gel fuel that is indicating signs of wax formation.

**Note:** The exact pour point and CFPP temperature of a fuel varies widely depending on the fuel's chemical composition. More so in Bio-diesel fuels. Champion Brands, LLC advises mid-distillate consumers to conduct a quality control program of regular fuels testing to determine pour point and CFPP.

Treat Gallons	FUEL TYPE	
	ULSD	BIO up to B20
	Drops Original Gel Point Up To	
1:1500	32°F	25°F
1:1125	40°F	30°F
1:900	46°F	34°F
1:750	50°F	37°F

Champion<sup>®</sup> Diesel Flo K should not be added to gelled fuel. Suppliers and consumers should always check with the fuel manufacturer to make sure the fuel complies with engine manufacturer's specifications for winter usage.

Effective 04/13