

## **NEW & IMPROVED FOR VLSFO/2020 FUELS**



### **100% CONCENTRATED HEAVY FUEL FOT**

**PRI-SOLV** is the world's only *100% concentrated, 100% organic*, non-petroleum sludge dispersant for marine fuels. **PRI-SOLV's** remarkable capability to reduce fuel sludge, improve stability & compatibility, while also contributing to optimum combustion characteristics, is unmatched in the industry.

**PRI-SOLV** delivers four primary benefits to vessel operators:

- **Improves fuel stability & compatibility for the new VLSFO/2020 blended fuels**
- **25-35 percent sludge reductions**
- **Vastly improved purifier operations**
- **Optimum combustion efficiency**



***PRI-SOLV** prevents severe compatibility & stability problems which can disable purifiers and result in costly vessel delays.*

**PRI-SOLV** has successfully reversed many severe cases of poor fuel stability & compatibility/poor-quality fuels. Thus, saving vessel owners hundreds of thousands of dollars in charter hire loss and de-bunkering costs. **PRI is #1 for improving poor quality fuels worldwide.**

#### **SLUDGE FREE FUEL SYSTEMS**

- **PRI-SOLV** keeps purifiers, fuel lines, pumps, fuel heaters and filters/strainers sludge free, while also maintaining tank cleanliness for VLSFO

#### **FUEL QUALITY ISSUES – STABILITY & COMPATIBILITY**

- **PRI-SOLV** solves fuel problems. Fuel compatibility and poor fuel stability are the #1 and #2 issues when burning the new VLSFO/2020 blended fuels.

#### **OPTIMUM FUEL COMBUSTION**

- **PRI-SOLV** treated fuel ensures improved fuel atomization and reduced fuel injector fouling. Engines maintain a higher level of operational efficiency via reduced deposits. Combustion is optimized with emissions and soot also reduced.

#### **UNMATCHED VALUE**

Dosing rate is one liter per 30 mt. One 208-liter drum treats 6240 metric tons. No special dosing pump equipment is required. In terms of cost per mt treated and performance capability, ***PRI-SOLV** has absolutely no equal in the world today.*



Specifications	
Color & Appearance	Dark Amber Liquid
Boiling Point	>150 C.
Flash Point	>100 C.
Specific Gravity	0.78 – 0.81
Water Solubility	Soluble
USA DOT ID Number	NON-REGULATED
IMDG	Not classified as dangerous under IMDG regulation
IATA	Not classified as dangerous under IATA regulations

#### Dosage Rate:

**PRI-SOLV** is dosed at the rate of 1:30,000 (one liter per 30 mt), regardless of fuel specifications under ISO 8217. It is recommended that for the first two months (approximately 2-3 bunkerings) of application, a dose rate of 1 liter per 25 mt is followed. This is to begin the process of improving purifiers and the entire fuel system

When comingling different blends of VLSFO or problematic fuels, high TSP, etc. we recommend a dose rate of 1:20,000 (one liter per 20 mt). For severely out of spec fuel, fuel with very high TSP, or emergency situations on board, we recommend a dose rate of 1:10,000 (one liter per 10 mt).

#### Dosage Method:

Power Research Inc. suggests that **PRI-SOLV** is highly miscible with heavy fuel oil and may be added directly to tanks prior to bunkering. Agitation from fuel flow into the tank typically provides a sufficient mixture.

#### Quality control:

**PRI-SOLV** is manufactured in accordance with strict, chemical manufacturing standards. Each blend is numbered, and a retain sample is FTIR tested against a laboratory standard to ensure optimal conformance.

#### Miscibility:

**PRI-SOLV** is a highly complex blend of organic chemistries that, once blended with heavy fuel, will not stratify or separate, even with fuel purification. In fact, purification systems remain cleaner and more efficient when processing **PRI-SOLV** treated fuels.