



## HFO TREATMENT FOR CARBON, SOOT, & SLUDGE CONTROL

Economical **PRI-27** provides a cost-effective solution in overcoming three primary issues associated with today's heavy fuel oil usage in modern marine diesel engines – carbon, soot and sludge.

- **Carbon Killer:** **PRI-27** elevates the ignition quality of all heavy fuel oils – stopping the development of power robbing and potentially damaging carbon deposits on critical engine components.
- **Soot Buster:** **PRI-27** prevents excessive soot fouling of exhaust gas economizers, providing greater efficiencies.
- **Sludge Cutter:** **PRI-27** cuts sludge like no other, recovering lost fuel value while greatly reducing the high cost of slops disposal.



Taken all together, these benefits provide greatly improved operational reliability and significant cost reduction, all at an economical price.

**PRI-27** is safe, metal-free, and easy to use, requiring no online dosing equipment. **PRI-27** may be added directly to tanks just prior to bunkering at the economical dose rate of 1 liter per 12,000 liters of fuel oil.

**PRI-27** technology is derived from PRI's full-featured chemistry, **PRI-RS**, containing many of the same core benefits - with the exceptions of sulfur and vanadium control. **PRI-27:**

- Inhibits Carbon Deposits
- Stops Soot Build-up
- Cuts Costly Sludge
- Economical 1:12,000 dose rate
- Tank Direct Dosing
- Safe, Non-Hazardous



Specifications	
Color & Appearance	Dark Amber Liquid
Odor	Hydrocarbon
Boiling Point	213 C.
Flash Point	68 C.
Specific Gravity	0.78 – 0.81
Water Solubility	Insoluble
USA DOT ID Number	UN 1268
Class/Division	Combustible Liquid
IMDG	Not classified as dangerous under IMDG regulation
IATA	Not classified as dangerous under IATA regulations

#### Dosage Rate:

**PRI-27** is dosed at the rate of 1:12,000, regardless of fuel specifications under ISO 8217. The fixed dosage rate was developed in consideration of the fact that heavy fuel oil characteristics can be widely variable, and that quality standards, as proscribed under ISO 8217 do not completely account for all deficiencies associated with fuel performance.

Hence, optimal protection is ensured at the 1:12,000 dose rate.

#### Dosage Method:

Power Research Inc. suggests that **PRI-27** can be dosed at the main bunker manifold by means of a safe and easily operated air driven gear pump arrangement. However, **PRI-27** is highly miscible with heavy fuel oil and may be added directly to tanks no greater than 60 minutes prior to bunkering. Agitation from fuel flow into the tank typically provides a sufficient mixture.

#### Quality control:

**PRI-27** 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-27** 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-27** treated fuels.