



## PRODUCT BULLETIN

# FUEL OIL DISCUSSION

## Fuel Additive 10

### General Description

Fuel Oil is a liquid that remains as a residue when distillate fuels are removed from crude petroleum during refining. The impurities in the original crude are concentrated in the residue giving rise to a number of difficulties in the combustion of residual fuel oil. Fuel Oil is rich in sludge-forming unsaturates and sulphur, ash and moisture. The presence of paraffinic and asphaltic particles in the fuel oil also causes improper atomization and prevents efficient burning of fuel oil. Incomplete combustion results in excessive formation of soot and smoke.

After the oil crisis of 1973, users of petroleum fuels started looking for means to increase the efficiency of their heat generating equipment. The chemistry of fuel combustion and additives has been much researched since then.

Regular use of FA-10 in Furnace Oil, LSHS Fuel, Light Diesel Oil and Naptha Oil gives the following benefits:

- . Sludge formation is prevented.
- . Existing sludge is broken into minute particles and burnt.
- . Clogging of fuel lines and filters is prevented.
- . Atomization of fuel is improved.
- . Deposits on burner nozzles are eliminated.
- . Flame is stable, hotter and in the required direction.
- . Combustion is catalytically improved.
- . Soot formation is reduced.
- . Fireside deposits are eliminated.
- . Heat transfer is improved.
- . Vanadium and sodium in the fuel are neutrallized.
- . Formation of sulphur trioxide is prevented and corrosion is inhibited.
- . Stack temperature is reduced.
- . Carbon monoxide, oxygen and unburnt hydrocarbons in the stack gases are minimized while carbon dioxide in stack gases is increased.
- . Frequent cleaning, maintenance and overhaul are not required.
- . Fuel consumption is reduced by 4-6%.

We invite you to call and find how FA-10 can help you in overcoming the difficulties that are normally encountered in boilers, furnaces and turbines using Fuel Oil.