



# M <sup>OIL</sup> LubenzAdd® 451 HIGH BORONATED PIBSI

## > PRODUCT INTRODUCTION:

It is a High Boron based Polyisobutylene Succinimide dispersant. It also provides excellent low temperature sludge and varnish control in gasoline engines, and effective dispersancy for deposit control in both medium speed and high temperature super-charged diesel engines. It is used for blending high quality multigrade gasoline and diesel engine oil.

#### FORMULATION

Recommended Dosage: 1 % to 4% w/w.

#### ADVANTAGES

- 1) Excellent low-temperature sludge dispersibility and high temperature detergency.
- 2) Free from chlorine (conforming to environmental requirements)
- 3) Effectively inhibits the generation of coke

## PRODUCT QUALITY CHARACTERISTICS

PROPERTIES	TEST METHOD	SPECIFICATION
Appearance	Visual	Clear transparent free from
		suspended matter
Specific Gravity@15.6°C	ASTM	0.891 - 0.930
	D1298	
Kinematic Viscosity @100°C cSt.	ASTM	220 Min
	D445	
Flash Point, <sup>0</sup> C (PMCC)	ASTM D93	165 - 175
TBN mg of KOH/g	ASTM	30-40
	D2896	
Nitrogen, %wt	ASTM	1.8 - 2.1
_	D2868	
Boron, %wt	ASTM	1.4 - 1.6
	D4951	

### PRODUCT STORAGE / HANDLING / TRANSPORTATION / PACKAGE.

The Storage temperature should not exceed 50°C the loading / unloading and blending temperature should not exceed 60°C. It is not flammable, not explosive, not corrosive, in the items of safety, environment protection etc. it is normal petroleum product, with no special protection. The product packed with 200 Kgs drums and 50 kgs carbos.

#### SAFETY AND HANDLING INFORMATION:

For further information, please refer to relevant MSDS