



**CHEMPOL**  
ADDITIVES & CHEMICAL SPECIALITY

## CHEMPOL 9012M Marine Diesel Cylinder Lubricant Oil Additive

### Application

CHEMPOL 9012M has been developed to formulate high quality Marine Diesel Cylinder Lubricants (MDCL) in cross-head engines burning high sulfur residual fuels.

It may be also used as TBN booster to formulate high TBN lubricants for Four Stroke Engines.

### Recommended Dosage

Treat rates % wt	Performance
20.0	For 50 TBN oils in suitable basestocks
27.8	For 70 TBN oils in suitable basestocks
31.6	For 80 TBN oils in suitable basestocks
39.5	For 100 TBN oils in suitable basestocks

### Typical Characteristics

Property	Method	Value
Appearance	Visual	Dark brown viscous liquid
ASTM Colour	ASTM D 6045	6.8
Specific gravity @15.6 °C, g/ml	ASTM D 4052	1.10
Flash Point, PMCC, ° C	ASTM D 93	190
Viscosity @ 100 °C, cSt	ASTM D 445	100
Total Base Number, mg KOH/g	ASTM D 2896	260
Calcium, %wt	ASTM D 5185	9.2
Zinc, %wt	ASTM D 5185	0.05
Phosphorus, %wt	ASTM D 5185	0.02

### Handling/ Precaution

When handling this product a MAXIMUM temperature of 60°C should be observed for storage, unloading and blending. However, it is strongly recommended that for long-term storage the temperature should not exceed 50°C. For detailed data, please refer to the relevant MSDS.