



## MP 3012

### MARINE OIL API CF

Black Bulls MP 3012 Marine oil is a premium quality, extra high performance, marine diesel engine. It is specially developed for use in heavy duty high speed diesel engines. It has an optimum viscosity of over 10+ cSt. at 100°C and low volatility with high alkalinity level to ensure excellent lubricant distribution and oil film retention. Black Bulls MP 3012 Marine has demonstrated outstanding ring and liner protection and cleanliness under sustained operation.

#### Typical Properties:

PROPERTY	TEST METHOD	TYPICAL VALUES
<b>ISO Grade</b>		<b>30</b>
Specific Gravity at 15°C	ASTM D 1298	0.8750
Flash Point, °C,	ASTM D 92	236
Pour Point, °C,	ASTM D 97	-12
cSt, at 40 °C	ASTM D 445	Reports
cSt, at 100 °C	ASTM D 445	10.50
Viscosity Index,	ASTM D 2270	105
TBN, mg KOH/g,	ASTM D 2896	12

#### Applications:

- Turbocharged and naturally aspirated main and auxiliary engines of all types and all ratings, running on Gas Oil or Marine Diesel Oil.
- Bearings and stern-tubes.
- Reduction gear lubrication.

#### Specifications and Approvals:

The MP 3012 range has been developed in close collaboration with OEMs and meets the requirements of all major engine manufacturers.

#### Features and Benefits:

- Extend engine life.
- Prevent scuffing and scoring of engine parts
- Excellent thermal and oxidation stability can lead to reduced deposits and sludge formation. Cleaner engines can lead to reduced component wear rates.
- Exceptional anti-wear properties lead to potentially reduced liner and ring wear and excellent anti-scuffing control.
- Outstanding detergency capability leads to potentially cleaner pistons and liners and can help extend periods between overhauls.

