



### MARINE 3030 & 3040

#### PRODUCT DESCRIPTION:

MARINE 3030 and 3040 are specifically designed trunk piston engine oils that are used for the crankcase lubrication requirements of high-output, medium-speed engines and similar marine-type applications. These oils are made from thermally stable base oils that are derived from solvent-refined paraffin. They feature an effective additive package that enhances load-carrying ability, oxidation stability, and dispersancy/detergency. These oils also provide effective acid neutralization and alkalinity retention, even when high-Sulphur fuel is utilized. They are able to handle heavy residual fuels that have a high asphalt content.

#### APPLICATION:

MARINE 3030 and 3040 oils are specifically recommended for use in high-output trunk piston marine diesel engines that operate on heavy residual fuels with a sulfur content of up to 2.0%.

#### FEATURES & BENEFITS:

- Excellent TBN retention, with low oil consumption
- Cleaner piston, ports and cylinders, thus extending overhauls
- Fast separation from water in case of water contamination
- Low under crown deposits
- Controls sludge formation, thus increasing oil filter life and reduces cleaning frequencies

#### PERFORMANCE STANDARDS: Meets or Exceeds:

- API CF

#### MEETS OEMs

- MAN
- Mak / Caterpillar
- Wartsila
- Yanmar
- Daihatsu

#### TYPICAL PROPERTIES:

| PARAMETERS                        | TEST METHOD | UNIT              | MARINE 3030 | MARINE 3040 |
|-----------------------------------|-------------|-------------------|-------------|-------------|
| SAE Grade                         |             |                   | 30          | 40          |
| Kinematic Viscosity @ 104°F/40°C  | ASTM D445   | cSt               | TBR         | TBR         |
| Kinematic Viscosity @ 212°F/100°C | ASTM D445   | cSt               | 11.0        | 15.0        |
| Viscosity Index (min)             | ASTM D2270  | -                 | 95          | 95          |
| SP. Gravity @ 60°F                | ASTM D4052  | g/cm <sup>3</sup> | TBR         | TBR         |
| Flash Point (min)                 | ASTM D92    | °C                | 220         | 220         |
| Pour Point (max)                  | ASTM D97    | °C                | -9          | -9          |
| TBN                               | ASTM D2896  | mg KOH/g          | 30          | 30          |

#### HEALTH & SAFETY, ENVIRONMENT:

Prolonged and repeated contact with oil may cause skin disorders. Avoid contact. Wash immediately with soap and water. Do not discharge used oil in to drains or the environment. Dispose to an authorized used oil collection point. For further Information on Safety Guidelines please refer to MSDS available on our website [www.bravoil.ae](http://www.bravoil.ae)

#### HEALTH & SAFETY:

This product is not likely to present any significant health or safety hazards when properly used in the recommended application and good standards of personal hygiene are maintained. Reference is made to the Safety Data Sheet (SDS) which is available on request via your local sales office or via the internet [www.bravoil.ae](http://www.bravoil.ae)

#### PROTECT THE ENVIRONMENT:

Take used oil to an authorized collection point. Comply with local regulation. Do not discharge into drains, soil or water.

#### STORAGE:

We recommend to store all packages under cover. In case outside storage is unavoidable, drums should be laid horizontally to avoid the possible ingress of water and damage to drum markings. Products should never be stored above 60°C, exposed to hot sun or freezing conditions.