



# PRODUCT DATA SHEET

## Havens Trunk Piston Engine Oil 4050

*Havens Trunk Piston Engine Oil 4050 specially designed for modern Medium Speed 4-stroke Engines running Intermediate Fuel Oil (IFO) or Heavy Fuel Oil (HFO).*

### DESCRIPTION

**Havens Trunk Piston Engine Oil 4050** is a range of trunk piston engine oils developed for use in medium speed diesel engines burning residual fuels. This oil combines an exclusive formulation of latest additive technologies, and a highly refined base oil to provide a substantial safety margin to cope with the higher stress levels even with the latest and future designs of diesel engines.

### PROPERTIES

- Excellent thermal resistance and high temperature oxidation resistance.
- Very good detergent and dispersant properties at high temperatures.
- Good wear protection and oil film strength at extreme pressures
- Excellent water resistance.
- Reduced build up heavy deposits in the engine leading to a reduction in maintenance costs.
- Very good neutralizing capability of acidic products of combustion.

### APPLICATIONS

- Turbocharged main and auxiliary engines of all types and all ratings running on
- Intermediate Fuel oil or on Heavy Fuel oil with high sulphur content.
- Bearings and stern-tubes.
- Reduction gear lubrication.

### TYPICAL PROPERTIES

| Havens Trunk Piston Engine Oil 4050 |             |                |
|-------------------------------------|-------------|----------------|
| Typical Properties                  | SAE Grade   | 40             |
|                                     | TBN         | 55             |
| Test Parameters                     | ASTM Method | Typical Values |
| Density @ 15°C, kg/l                | ASTM D1298  | 0.92           |
| Viscosity @ 100°C, cSt              | ASTM D445   | 15             |
| Viscosity @ 40°C, cSt               | ASTM D445   | 150            |
| Viscosity Index                     | ASTM D2270  | 100            |
| Flash Point, °C                     | ASTM D92    | ≥ 230          |
| BN, mg KOH/g                        | ASTM D2896  | 56             |

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*The values shown above are typical values at the date of publication. Oscar Lubricants reserves the right to change these typical values without prior notice.*