# **PROCESS OIL**



WORLD CLASS LUBRICANTS FOR TROPICAL CONDITIONS

#### **GENERAL**

**NP Process Oils** are manufactured from premium quality hydro-treated base oils. They are suitable for general-purpose lubrication where non-additive oils meet the lubrication requirements.

These oils offer the following benefits:

- Good oxidation stability
- Good Demulsibility
- Moderate low temperature flow characteristics
- Low volatility
- Low carbon forming tendency
- High thermal stability

#### MAIN APPLICATIONS

- Reciprocating air compressors with air discharge temperatures up to 100 °C.
- Heat transfer fluid for closed heat transfer systems up to 320 °C.
- As plain and rolling element bearings, spur, bevel, helical and worm gear box lubricants, where temperatures and loadings are light to moderate.
- General machine lubricants where straight mineral paraffinic oils are recommended.

The low viscosity grades (ISO V.G. 22 to 46) find general economic applications as:

- Non-compounded light colored sewing machine lubricants
- Air line lubricants
- Vacuum pump lubricants

### **TYPICAL PROPERTIES – LIGHT GRADES**

|   | 22     | 32     | 37     | 46     | 68     | 100    | 150    |  |
|---|--------|--------|--------|--------|--------|--------|--------|--|
| Kinematic Viscosity @ 40°C, cSt           | 22.00  | 32.00  | 36.75  | 46.00  | 64.6   | 100.00 | 150.00 |  |
| Kinematic Viscosity @ 100°C, cSt          | 4.24   | 5.37   | 5.85   | 6.78   | 8.39   | 11.00  | 14.41  |  |
| Viscosity Index                           | 93     | 100    | 100    | 101    | 99     | 94     | 93     |  |
| Pour Point, °C                            | -12    | -6     | -6     | -6     | -3     | -3     | -3     |  |
| Flash Point (PMCC), °C                    | 216    | 218    | 220    | 224    | 227    | 251    | 251    |  |
| Specific Gravity @ 60°/60°F               | 0.8636 | 0.8685 | 0.8734 | 0.8727 | 0.8787 | 0.8784 | 0.8854 |  |
| API Gravity                               | 32.9   | 31.5   | 30.5   | 30.5   | 29.5   | 29.4   | 28.8   |  |
| Emulsion at 82°C, Separation time, (mins) | 1      | 5      | 6      | 8      | 15     | 10     | 15     |  |

## TYPICAL PROPERTIES - HEAVY GRADES

| the second se | 220                | 320    | 460    | 680    | 1000    | 1500    |  |  |  |
|---|--------------------|--------|--------|--------|---------|---------|--|--|--|
| Kinematic Viscosity @ 40°C, cSt   | 220.00             | 320.00 | 460.00 | 680.00 | 1000.00 | 1500.00 |  |  |  |
| Kinematic Viscosity @ 100°C, cSt  | 18. <del>5</del> 0 | 23.97  | 30.12  | 37.30  | 44.30   | 50.96   |  |  |  |
| Viscosity Index   | 93                 | 95     | 94     | 90     | 82      | 80      |  |  |  |
| Pour Point, °C  | -3                 | -3     | -3     | -3     | -3      | -3      |  |  |  |
| Flash Point (PMCC), °C  | 257                | 257    | 257    | 268    | 266     | 266     |  |  |  |
| Specific Gravity @ 60°/60°F   | 0.8895             | 0.8939 | 0.8974 | 0.9092 | 0.9243  | 0.9268  |  |  |  |
| API Gravity   | 28.1               | 27.4   | 26.0   | 24.5   | 21.8    | 15.8    |  |  |  |
| Emulsion at 82°C, Separation time, (mins)   | 15                 | -      | -      | -      | -       | -       |  |  |  |

#### HEALTH AND SAFETY

**NP Process Oil** is unlikely to pose any health or safety hazards when used in the recommended applications, provided good standards of personal and industrial hygiene are observed. Please refer to Material Safety Data Sheet (MSDS) for further information.