

## CIRCULATING OILS FOR BEARING SYSTEMS AND STEAM CYLINDER OILS

- *Gandar*
- *Sebana Series*
- *Sebana P Series*
- *Silinap Series*
- *Medripal Series*

### GANDAR 800 □ PELUMAS ASPOT GERBONG KERETA API

| Characteristic                     | GANDAR 800 |
|------------------------------------|------------|
| ISO Viscosity Grade                | 460        |
| Specific density, 15 °C            | 0.8964     |
| Viscosity Kinematic, at 40 °C, cSt | 460.3      |
| at 100 °C, cSt                     | 30.42      |
| Viscosity Index                    | 95         |
| Colour ASTM                        | L1.5       |
| Flash Point, (COC) °C              | 594        |
| Pour Point, °C                     | -9         |

### SEBANA □ PELUMAS BANTALAN INDUSTRI

TYPICAL CHARACTERISTIC

KARAKTERISTIK TIPIKAL

| Characteristic                     | Sebana 90 | Sebana 120 | Sebana 170 | Sebana 300 |
|------------------------------------|-----------|------------|------------|------------|
| No. SAE Viscosity Grade            | 100       | 220        | 320        | 680        |
| Viscosity Kinematic, at 40 °C, cSt | 99.82     | 221.02     | 320.58     | 623.92     |
| at 100 °C, cSt                     | 11.20     | 18.99      | 23.97      | 37.65      |
| Viscosity Index                    | 97        | 96         | 95         | 97         |
| Specific density, 15 °C            | 0.8846    | 0.8946     | 0.8983     | 0.9022     |
| Colour ASTM                        | 1.0       | L1.0       | L1.5       | Dark       |
| Flash Point, (COCC) °C             | 258       | 226        | 268        | 321        |
| Pour Point, °C                     | -9        | -9         | -9         | -9         |

# SEBANA P□PELUMAS BANTALAN INDUSTRI

## TYPICAL CHARACTERISTIC

## KARAKTERISTIK TIPIKAL

| Characteristic                     | Sebana P-9 | Sebana P-22 | Sebana P-32 | Sebana P-46 | Sebana P-68 |
|------------------------------------|------------|-------------|-------------|-------------|-------------|
| No. SAE Viscosity Grade            | 9          | 22          | 32          | 46          | 68          |
| Viscosity Kinematic, at 40 °C, cSt | 9.4        | 22.8        | 32.3        | 46.3        | 68.1        |
| at 100 °C, cSt                     | 2.3        | 4.4         | 5.3         | 6.7         | 8.7         |
| Viscosity Index                    | 50         | 101         | 99          | 99          | 99          |
| Specific density, 15 #C            | 0.884      | 0.870       | 0.875       | 0.875       | 0.878       |
| Colour ASTM                        | L0.5       | 0.5         | 0.5         | 0.5         | L1.0        |
| Flash Point, (COC) °C              | 159        | 204         | 240         | 240         | 255         |
| Pour Point, °C                     | -42        | -18         | -9          | -9          | -9          |

| Characteristic                     | Sebana P-100 | Sebana P-150 | Sebana P-220 | Sebana P-320 | Sebana P-460 |
|------------------------------------|--------------|--------------|--------------|--------------|--------------|
| No. SAE Viscosity Grade            | 100          | 150          | 220          | 320          | 460          |
| Viscosity Kinematic, at 40 °C, cSt | 99.1         | 142.55       | 210.24       | 309.39       | 440.95       |
| at 100 °C, cSt                     | 11.1         | 14.05        | 18.20        | 23.48        | 29.59        |
| Viscosity Index                    | 97           | 95           | 95           | 95           | 95           |
| Specific density, 15 #C            | 0.881        | 0.886        | 0.890        | 0.893        | 0.898        |
| Colour ASTM                        | L1.0         | 1.0          | 1.0          | L2.5         | L1.5         |
| Flash Point, (COC) °C              | 273          | 278          | 280          | 292          | 308          |
| Pour Point, °C                     | -9           | -9           | -9           | -9           | -9           |

# SILINAP□MINYAK SILINDER MESIN UAP

## TYPICAL CHARACTERISTIC

## KARAKTERISTIK TIPIKAL

| Characteristic                     | Silinap 160 M | Silinap 220 M | Silinap 280 M |
|------------------------------------|---------------|---------------|---------------|
| No. SAE Viscosity Grade            | 460           | 1000          | 1500          |
| Viscosity Kinematic, at 40 °C, cSt | 480.64        | 1000.32       | 1374.26       |
| at 100 °C, cSt                     | 31.29         | 58.75         | 57.6          |
| Viscosity Index                    | 95            | 90            | 90            |
| Specific density, 15 °C            | 0.9026        | 0.9279        | 0.9262        |
| Colour ASTM                        | L2.0          | Dark          | Dark          |
| Flash Point (COC), °C              | 312           | 334           | 329           |
| Pour Point, °C                     | 9             | -6            | -6            |

# MEDRIPAL 2,3,4,5,6□PELUMAS BANTALAN MESIN DIESEL

**TYPICAL CHARACTERISTIC****KARAKTERISTIK TIPIKAL**

| Characteristic                        | Medripal 2 | Medripal 3 | Medripal 4 | Medripal 5 | Medripal 6 |
|---------------------------------------|------------|------------|------------|------------|------------|
| No. SAE Viscosity Grade               | 68         | 100        | 150        | 220        | 320        |
| Viscosity Kinematic,<br>at 40 °C, cSt | 65.38      | 107.37     | 144.20     | 221.10     | 292.60     |
| at 100 °C, cSt                        | 8.58       | 11.79      | 14.37      | 18.91      | 22.87      |
| Viscosity Index                       | 102        | 98         | 97         | 96         | 97         |
| Specific density, 15 °C               | 0,8814     | 0,8837     | 0,8867     | 0,8899     | 0,8932     |
| Colour ASTM                           | 1.0        | L1.0       | L1.5       | L2.5       | L1.5       |
| Flash Point (COC), °C                 | 248        | 260        | 262        | 268        | 272        |
| Pour Point, °C                        | -21        | -18        | -15        | -9         | -9         |



**PERTAMINA**  
**LUBRICANTS**