# PRODUCT DATA SHEET



#### **Marathon Multipurpose Hydraulic Oils**

#### **Product Description**

Marathon Multipurpose Hydraulic Oils are formulated with highly refined Group II base stock paraffinic oils. Enhanced with premium additives, Multipurpose Hydraulic Oils offer exceptional anti-wear protection, oxidation, and corrosion inhibition.

Marathon Multipurpose meets the performance specifications of various pump manufacturers. This product's excellent demulsibility, thermal and oxidation stability, and reduced viscosity change over wide temperature ranges empower performance in extreme conditions.

#### **Features**

- Quick air release and foam inhibition limit pump cavitation in systems with high circulation rates
- ✓ Superb water separation (demulsibility) facilitates water removal
- Optimal thermal and oxidation stability reduces deposit formation in reservoirs
- ✓ Outstanding wear protection
- ✓ Limited viscosity changes over a wide temperature range

#### Industry and OEM Applications<sup>1</sup>

- Parker Denison HF-0 (HF-1 & HF-2 are included under HF-0 designation)
- Eaton Vickers E-FDGN-TB002-E (this specification supersedes I-286 & M-2950-S)
- GM Lubricant Standard LH-03-1-11, LH-04-1-11, LH-06-1-11
- Racine, variable volume pump

- FIVES (formerly MAG, formerly Cincinnati Milacron)
  P-68, 69 & 70
- B.F. Goodrich 0152
- Lee-Norse 100-1, Bosch Rexroth RD/RE 90220-1
- Toshiba Machinery
- Afnor E-48-603
- ISO 11158, ASTM D6158-05, DIN 51524-2

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#### **Marathon Multipurpose Hydraulic Oil**

### Technical Data (typical values)

| ISO Grade                                     |       | 32  | 46                  | 68  | 100   |
|---|-------|---|---------------------|---|---|
| Product Numbers                               |       | 1050 (bulk); 0346 (55 g<br>drum); 0347 (5 g pail) |                     | 1052 (bulk); 0354 (55 g<br>drum); 0355 (5 g pail) | 1053 (bulk); 0358 (55 g<br>drum); 0357 (5 g pail) |
| Viscosity @ 40°C, cSt                         | D445  | 29.79   | 46.07               | 63.62   | 92.87   |
| Viscosity @ 100°C, cSt                        | D445  | 5.54  | 7.05                | 8.57  | 10.75   |
| Viscosity Index                               | D2270 | 125   | 111                 | 106   | 99  |
| Specific Gravity @ 60°F                       | D4052 | 0.8518  | 0.8554              | 0.8688  | 0.8749  |
| Pour Point, °C                                | D5950 | -45   | -42                 | -33   | -36   |
| Color ASTM                                    | D1500 | L1.0  | L1.0                | L1.5  | L1.5  |
| Demulsibility                                 | D1401 | 38-39-3<br>(10 min)                               | 40-38-2<br>(10 min) | 40-37-3<br>(10 min)                               | 40/40/0<br>(5 min²)                               |
| Copper Corrosion                              | D130  | 1b  | 1b                  | 1b  | 1b  |
| Foam characteristics                          | D892  | PASS  | PASS                | PASS  | PASS  |
| Oxidation Life, hrs. to<br>TAN = 2.0, minimum | D943  | 5,000   | 4,500               | 4,000   | 1,500   |
| Total Acid Number, mg<br>KOH/g                | D664  | 0.602   | 0.511               | 0.560   | 0.101   |

<sup>(1)</sup> AW 100 excluded from most of these applications

Consult your owner's manual regarding its suitability for use in equipment from other OEMs. These hydraulic oils perform in most equipment without concern for fluid-related harm.

The recommended shelf life for these oils is typically 48 months from manufacturing date when stored properly in the original sealed Containers

<sup>(2)</sup> Demulsibility at 82°C