## TECHNICAL DATA SHEET



### **No-Tox HD Food Grade Oil**

No-Tox HD Food Grade Oil, commonly known as No-Tox HD Oil, is a series of multipurpose white mineral lubricating oils. No-Tox HD Food Grade Oil, available in 10 grades from ISO VG 15 to 460, is designed to give exceptional anti-wear, rust and corrosion protection in a wide range of applications including hydraulic systems, gear cases, chains, compressors, bearings and circulating systems and other applications found in the "clean" industries such as food, beverage, pharmaceutical and personal care products.



No-Tox HD Food Grade Oil, formulated with the highest quality USP white mineral oils and food grade additives, meets NSF H1 and FDA requirements for materials that may have incidental contact with food as defined under Title 21 CFR, 178.3570. It is Kosher and Pareve approved, as well as Halal certified. ISO 21469 certified food grade lubricant.

Nonfood Compounds H1 Registered, ISO 21469 Certified

#### **APPLICATIONS**

- · Suitable for multi-service applications
- · Hydraulic pumps, motors, actuators
- Compressors and vacuum pumps
- · Enclosed gears including spur, bevel, and worm gears
- · Circulating systems, chains, bearings, spindles, joints, and others

#### **PRODUCT FEATURES**

- NSF H1 registered and ISO 21469 certified
- · Kosher and Pareve approved
- Halal certified
- · Bacteriological protection
- Excellent anti-wear properties
- High demulsibility
- · Rust and oxidation protection

#### **BENEFITS**

- Use where incidental food contact may occur
- · Effectively inhibits the growth of certain bacteria, yeast and mold in the lubricant
- Excellent equipment protection
- Excellent water separability
- · Long, trouble-free service life

#### DISTRIBUTED BY:

# TECHNICAL DATA SHEET



| Typical Physical Properties          |                |               |              |              |              |             |  |  |  |  |
|--------------------------------------|----------------|---------------|--------------|--------------|--------------|-------------|--|--|--|--|
| Property                             | Test<br>Method | 15            | 22           | 32           | 46           | 68          |  |  |  |  |
| Viscosity @ 40°C, cSt                | ASTM D445      | 14.6          | 21.3         | 32.4         | 45.9         | 67.1        |  |  |  |  |
| Viscosity @ 100°C, cSt               | ASTM D445      | 3.33          | 4.21         | 5.42         | 6.81         | 8.74        |  |  |  |  |
| Viscosity Index                      | ASTM D2270     | 96            | 100          | 101          | 102          | 102         |  |  |  |  |
| Pour Point, °C (°F)                  | ASTM D97       | -18 (0)       | -18 (0)      | -18 (0)      | -18 (0)      | -18 (0)     |  |  |  |  |
| Copper Strip Corrosion               | ASTM D130      | 1A            | 1A           | 1A           | 1A           | 1A          |  |  |  |  |
| Rust Test                            | ASTM D665      | Pass          | Pass         | Pass         | Pass         | Pass        |  |  |  |  |
| Foam Test Sequence I, II, III, ml/ml | ASTM D892      | Nil           | Nil          | Nil          | Nil          | Nil         |  |  |  |  |
| Falex EP Test Non-seizure Load, Ibf  | ASTM D3233     | 1500          | 1500         | 1500         | 1500         | 1500        |  |  |  |  |
| 4-Ball Wear Scar Diameter, mm        | ASTM D4172     | 0.4           | 0.4          | 0.4          | 0.4          | 0.4         |  |  |  |  |
| Vickers Total Mass Loss, mg          | ASTM D7043     | <15           | <15          | <15          | <15          | <15         |  |  |  |  |
| FZG Visual Test Failure Load Stage   | ASTM D5182     | -             |              | -            | -            |             |  |  |  |  |
| Specific Gravity                     | ASTM D1298     | 0.851         | 0.86         | 0.862        | 0.866        | 0.872       |  |  |  |  |
| Color                                |                | Water -w hite | Water -white | Water -white | Water -white | Water-white |  |  |  |  |

| Property                             | Test<br>Method | 100         | 150         | 220         | 320         | 460         |
|--------------------------------------|----------------|-------------|-------------|-------------|-------------|-------------|
| Viscosity @ 40°C, cSt                | ASTM D445      | 104         | 151         | 228         | 318         | 452         |
| Viscosity @ 100°C, cSt               | ASTM D445      | 11.7        | 15.5        | 20.5        | 26.6        | 35.8        |
| Viscosity Index                      | ASTM D2270     | 100         | 105         | 105         | 110         | 119         |
| Pour Point, °C (°F)                  | ASTM D97       | -15 (5)     | -15 (5)     | -15 (5)     | -14 (7)     | -14 (7)     |
| Copper Strip Corrosion               | ASTM D130      | 1A          | 1A          | 1A          | 1A          | 1A          |
| Rust Test                            | ASTM D665      | Pass        | Pass        | Pass        | Pass        | Pass        |
| Foam Test Sequence I, II, III, ml/ml | ASTM D882      | Nil         | Nil         | Nil         | Nil         | Nil         |
| Falex EP Test Non-seizure Load, Ibf  | ASTM D3233     | 1500        | 1750        | 1750        | 1750        | 1750        |
| 4-Ball Wear Scar Diameter, mm        | ASTM D4172     | 0.4         | 0.4         | 0.4         | 0.4         | 0.4         |
| Vickers Total Mass Loss, mg          | ASTM D7043     | -           | -           | -           | -           | -           |
| FZG Visual Test Failure Load Stage   | ASTM D5182     | 12+         | 12+         | 12+         | 12+         | 12+         |
| Specific Gravity                     | ASTM D1298     | 0.874       | 0.879       | 0.882       | 0.88        | 0.888       |
| Color                                |                | Water-white | Water-white | Water-white | Water-white | Water-white |

<sup>\*</sup> Vickers Total Mass Loss (ASTM D7043) concerns only light viscosity oils used in hydraulics

<sup>\*\*</sup> FZG Load Stage (ASTM D5182) concerns only heavier viscosity oils used for gear lubrication