



# PRODUCT DATA SHEET



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## NO-TOX<sup>®</sup> SYNTRA FOOD GRADE SYNTHETIC OIL

**No-Tox Syntra Food Grade Synthetic Oil**, commonly known as No-Tox Syntra Oil, is a series of full synthetic multipurpose lubricants that are NSF H1 registered for use where incidental food contact may occur. **No-Tox Syntra Food Grade Synthetic Oil** is a PAO-based, premium, non-toxic, high performance lubricant available in 11 grades ranging from ISO VG 15 to 1000. It is designed to give exceptional anti-wear and rust and corrosion protection in a wide range of applications including hydraulic systems, gear cases, chains, compressor, bearings and circulating systems and other applications found in the “clean” industries such as food, beverage, pharmaceutical and personal care products.

### *Applications*

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

### *Features and Benefits*

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|------------------------------------|---|
| ◆ NSF H1 registered                | Use where incidental food contact may occur.  |
| ◆ Compliances                      | Kosher and Pareve approved. Halal certified.  |
| ◆ Bacteriological protection       | Effectively inhibits the growth of certain bacteria, yeast and mold in the lubricant. |
| ◆ Fully synthetic                  | Long life, extended drain intervals.  |
| ◆ Outstanding anti-wear properties | Excellent equipment protection.   |
| ◆ Rust and oxidation protection    | Reduces sludge and varnish build-up.  |

### *General Description*

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**No-Tox Syntra Food Grade Synthetic Oil** is a series water-white, odorless and tasteless synthetic base lubricating oils for a wide range of “clean” industries applications. **No-Tox Syntra Food Grade Synthetic Oil** is also filtered through a 2-micron filter system to achieve the highest cleanliness standards. **No-Tox Syntra Food Grade Synthetic Oil**, formulated with the highest quality synthetic 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.

**Product No. 64233, 64234, 64235, 64236, 64237, 64238, 64239, 64240, 64241, 64242, 64243**

# NO-TOX<sup>®</sup> SYNTRA FOOD GRADE SYNTHETIC OIL

## TYPICAL PROPERTIES

| <b><u>Product No.</u></b>             | <b><u>64233</u></b>         | <b><u>64234</u></b>         | <b><u>64235</u></b>         | <b><u>64236</u></b>         |
|---------------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| ISO Viscosity Grade                   | 15                          | 32                          | 46                          | 68                          |
| Viscosity, ASTM D445                  |                             |                             |                             |                             |
| @ 40°C, cSt                           | 15.6                        | 31.4                        | 45.8                        | 67.8                        |
| @ 100°C, cSt                          | 3.69                        | 6.04                        | 7.85                        | 10.5                        |
| Viscosity, ASTM D2161                 |                             |                             |                             |                             |
| @ 100°F, SUS                          | 84.7                        | 161                         | 234                         | 347                         |
| @ 210°F, SUS                          | 38.7                        | 46.5                        | 52.5                        | 61.9                        |
| Viscosity Index, ASTM D2270           | 125                         | 142                         | 142                         | 143                         |
| Pour Point, ASTM D97                  |                             |                             |                             |                             |
| °C (°F)                               | -68 (-90)                   | -63 (-81)                   | -60 (-76)                   | -59 (-74)                   |
| Copper Strip Corrosion, ASTM D130     |                             |                             |                             |                             |
| 3 hrs @ 100°C, rating                 | 1a                          | 1a                          | 1a                          | 1a                          |
| Rust Test, ASTM D665, Procedure A & B | Pass                        | Pass                        | Pass                        | Pass                        |
| Foam Test, ASTM D892                  |                             |                             |                             |                             |
| Sequence I, II, III, ml/ml            | Nil                         | Nil                         | Nil                         | Nil                         |
| Falex EP Test, ASTM D3233 Method B    |                             |                             |                             |                             |
| Non-seizure Load, lbf                 | 2000                        | 2000                        | 2000                        | 2000                        |
| 4-Ball Wear Test, ASTM D4172          |                             |                             |                             |                             |
| @ 1200 rpm, 40 kg, 1 hr, 75°C         |                             |                             |                             |                             |
| Scar Diameter, mm                     | 0.40                        | 0.40                        | 0.40                        | 0.40                        |
| Vickers Vane Pump Test, ASTM D7043    |                             |                             |                             |                             |
| Total Mass Loss, mg                   | <15                         | <15                         | <15                         | <15                         |
| FZG Visual Test, ASTM D5182           |                             |                             |                             |                             |
| Failure Load Stage                    | --                          | --                          | --                          | --                          |
| Specific Gravity, ASTM D1298, 60/60°F | 0.810                       | 0.835                       | 0.838                       | 0.841                       |
| Color                                 | Colorless to<br>Pale Yellow | Colorless to<br>Pale Yellow | Colorless to<br>Pale Yellow | Colorless to<br>Pale Yellow |

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## TYPICAL PROPERTIES

| <b><u>Product No.</u></b>             | <b><u>64237</u></b>         | <b><u>64238</u></b>         | <b><u>64239</u></b>         | <b><u>64240</u></b>         |
|---------------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| ISO Viscosity Grade                   | 100                         | 150                         | 220                         | 320                         |
| Viscosity, ASTM D445                  |                             |                             |                             |                             |
| @ 40°C, cSt                           | 102                         | 150                         | 220                         | 320                         |
| @ 100°C, cSt                          | 14.6                        | 19.3                        | 26.1                        | 34.6                        |
| Viscosity, ASTM D2161                 |                             |                             |                             |                             |
| @ 100°F, SUS                          | 523                         | 768                         | 1138                        | 1662                        |
| @ 210°F, SUS                          | 77.9                        | 97.8                        | 128                         | 168                         |
| Viscosity Index, ASTM D2270           | 148                         | 148                         | 151                         | 153                         |
| Pour Point, ASTM D97                  |                             |                             |                             |                             |
| °C (°F)                               | -55 (-67)                   | -53 (-63)                   | -47 (-53)                   | -45 (-49)                   |
| Copper Strip Corrosion, ASTM D130     |                             |                             |                             |                             |
| 3 hrs @ 100°C, rating                 | 1a                          | 1a                          | 1a                          | 1a                          |
| Rust Test, ASTM D665, Procedure A & B | Pass                        | Pass                        | Pass                        | Pass                        |
| Foam Test, ASTM D892                  |                             |                             |                             |                             |
| Sequence I, II, III, ml/ml            | Nil                         | Nil                         | Nil                         | Nil                         |
| Falex EP Test, ASTM D3233 Method B    |                             |                             |                             |                             |
| Non-seizure Load, lbf                 | 2000                        | 2000                        | 2000                        | 2000                        |
| 4-Ball Wear Test, ASTM D4172          |                             |                             |                             |                             |
| @ 1200 rpm, 40 kg, 1 hr, 75°C         |                             |                             |                             |                             |
| Scar Diameter, mm                     | 0.40                        | 0.40                        | 0.40                        | 0.40                        |
| Vickers Vane Pump Test, ASTM D7043    |                             |                             |                             |                             |
| Total Mass Loss, mg                   | --                          | --                          | --                          | --                          |
| FZG Visual Test, ASTM D5182           |                             |                             |                             |                             |
| Failure Load Stage                    | 12+                         | 12+                         | 12+                         | 12+                         |
| Specific Gravity, ASTM D1298, 60/60°F | 0.849                       | 0.850                       | 0.852                       | 0.854                       |
| Color                                 | Colorless to<br>Pale Yellow | Colorless to<br>Pale Yellow | Colorless to<br>Pale Yellow | Colorless to<br>Pale Yellow |

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## TYPICAL PROPERTIES

| <b><u>Product No.</u></b>             | <b><u>64241</u></b>         | <b><u>64242</u></b>         | <b><u>64243</u></b>         |
|---------------------------------------|-----------------------------|-----------------------------|-----------------------------|
| ISO Viscosity Grade                   | 460                         | 680                         | 1000                        |
| Viscosity, ASTM D445                  |                             |                             |                             |
| @ 40°C, cSt                           | 460                         | 674                         | 1000                        |
| @ 100°C, cSt                          | 45.8                        | 61.2                        | 84.1                        |
| Viscosity, ASTM D2161                 |                             |                             |                             |
| @ 100°F, SUS                          | 2397                        | 3527                        | 5249                        |
| @ 210°F, SUS                          | 221                         | 295                         | 406                         |
| Viscosity Index, ASTM D2270           | 156                         | 159                         | 165                         |
| Pour Point, ASTM D97                  |                             |                             |                             |
| °C (°F)                               | -42 (-44)                   | -39 (-38)                   | -33 (-27)                   |
| Copper Strip Corrosion, ASTM D130     |                             |                             |                             |
| 3 hrs @ 100°C, rating                 | 1a                          | 1a                          | 1a                          |
| Rust Test, ASTM D665, Procedure A & B | Pass                        | Pass                        | Pass                        |
| Foam Test, ASTM D892                  |                             |                             |                             |
| Sequence I, II, III, ml/ml            | Nil                         | Nil                         | Nil                         |
| Falex EP Test, ASTM D3233 Method B    |                             |                             |                             |
| Non-seizure Load, lbf                 | 2000                        | 2000                        | 2000                        |
| 4-Ball Wear Test, ASTM D4172          |                             |                             |                             |
| @ 1200 rpm, 40 kg, 1 hr, 75°C         |                             |                             |                             |
| Scar Diameter, mm                     | 0.40                        | 0.40                        | 0.40                        |
| Vickers Vane Pump Test, ASTM D7043    |                             |                             |                             |
| Total Mass Loss, mg                   | --                          | --                          | --                          |
| FZG Visual Test, ASTM D5182           |                             |                             |                             |
| Failure Load Stage                    | 12+                         | 12+                         | 12+                         |
| Specific Gravity, ASTM D1298, 60/60°F | 0.856                       | 0.856                       | 0.859                       |
| Color                                 | Colorless to<br>Pale Yellow | Colorless to<br>Pale Yellow | Colorless to<br>Pale Yellow |