# TRIPTON® INDUSTRIAL GEAR OILS

## DESCRIPTION:

**TRIPTON® INDUSTRIAL GEAR OILS** are available in ISO viscosity grades 32, 46, 68, 100,150, 220, 320, 460, 680 and 1000 are made from high quality base oils and premium additives to provide excellent load carrying ability, extreme pressure (EP) properties, wear resistance, oxidation stability, anti-rust, anti-corrosion and anti-foam properties.

## FEATURES/BENEFITS:

**TRIPTON® INDUSTRIAL GEAR OILS** are the highest performance level, multi-purpose type hypoid, spiral or bevel gear lubricants for the most severe service conditions light and heavy equipment. These lubricants contain sulfur and phosphorus additive materials, but no zinc, in compliance with most manufacturers' requirements for industrial gearboxes.

## APPLICATIONS

**TRIPTON® INDUSTRIAL GEAR OILS** are recommended for all industrial gearboxes and other heavy equipment gears requiring American gear manufactures association (AGMA9005) lubricants.

## SPECIFICATIONS, APPROVALS & RECOMMENDATIONS

- Sufficient oxidation stability for a lifetime of 10,000 hours or two years at 80 ºC
- A load stage 12 pass in the FZG double speed test ( DIN51354 Part 2)
- Pass in the FVA-54/II micro pitting (gray staining) test at load stage 10 at 90 ºC

## 1- Physical and Chemical Properties

| **CODE** | | **TRL310831** | **TRL330931** | **TRL311031** | **TRL311131** | **TRL311231** |
|---|---|---|---|---|---|---|
| Property | ASTM's | Values | Values | Values | Values | Values |
| **ISO Viscosity Grade** | **D2422** | **32** | **46** | **68** | **100** | **150** |
| Gear Oils AGMA Lubr. No | - | 0 | 1 | 2 | 3 | 4 |
| Density @15 ºC/ g/mL | D1298 | >0.840 | >0.840 | >0.850 | >0.860 | >0.860 |
| Viscosity @ 40 ºC; cSt | D445 | 28.8-35.2 | 41.4-50.6 | 61.2-74.8 | 90-110 | 135-165 |
| Viscosity Index, mini | D2270 | 95 | 95 | 95 | 95 | 95 |
| Pour Point ºC, max | D97 | -25 | -25 | -20 | -20 | -15 |
| Flash Point (COC) ºC, mini. | D92 | 210 | 210 | 220 | 220 | 220 |
| Foaming (Seq I/Seq II/Seq III) | D892 | 20/50/20 (0/0/0) | | | | |
| TAN mg KOH/g | D974 | < 1.0 | | | | |
| Cu Strip Corrosion (3h@100ºC) | D130 | 1 | | | | |
| 4Ball (Welding load) Kg | D2783 | 200 | | | | |

**The above values may vary within commercially accepted tolerances.**

## 2- Physical and Chemical Properties

| CODE | | TRL311331 | TRL311431 | TRL311531 | TRL311631 | TRL311731 |
|---|---|---|---|---|---|---|
| Property | ASTM's | Values | Values | Values | Values | Values |
| **ISO Viscosity Grade** | **D2422** | **220** | **320** | **460** | **680** | **1000** |
| Gear Oils AGMA Lubr. No | - | 5 | 6 | 7 | 8 | 8A |
| Density @15 °C/ g/mL | D1298 | >0.870 | >0.870 | >0.870 | >0.870 | >0.870 |
| Viscosity @ 40 °C; cSt | D445 | 220±10% | 320±10% | 460±10% | 680±10% | 1000±10% |
| Viscosity Index, mini | D2270 | 95 | 95 | 95 | 95 | 95 |
| Pour Point °C, max | D97 | -15 | -12 | -10 | -10 | -6 |
| Flash Point (COC) °C, mini. | D92 | 210 | 210 | 220 | 220 | 220 |
| Foaming (Seq I/Seq II/Seq III) | D892 | 20/50/20 (0/0/0) | | | | |
| TAN mg KOH/g | D974 | < 1.0 | | | | |
| Cu Strip Corrosion (3h@100ºC) | D130 | 1 | | | | |
| 4Ball (Welding load) Kg | D2783 | 200 | | | | |

The above values may vary within commercially accepted tolerances.

**Packing:**
The products are available in the following:

| Code | TRL33nn31-01 | TRL33nn31-02 |
|---|---|---|
| Pack (L) | 200 L | 20 L |

**Expiration date**: *The recommended shelf life for these oils is typically 5 years from manufacturing date when stored properly in the original sealed containers.*

## HANDLING AND STORAGE

| | |
|---|---|
| **Precautions for safe handling:** Keep away from sources of ignition. No naked lights. No smoking. Do no eat, drink or smoke when using this product. Wash hands and other exposed areas with soap and water before leaving work.<br>**Specific end use(s):** Use only as Automotive and Industrial Gear Oils. | **Storage:** All packages should be stored under cover. Where outside storage is unavoidable drums should be laid horizontally to avoid the possible ingress of water and damage to drum markings.<br>Products should not be stored above 60°C, exposed to hot sun or freezing conditions. |

**Health, Safety & Environment**
Health and Safety

**TRIPTON®** Products are no any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

**Protect the Environment:** Take used oil to an authorized collection point. Do not discharge into drains, soil or water.