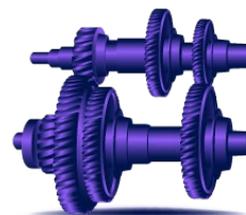


TECHNICAL PRODUCT SHEET

TITANUS EP

ISO 68,100,150,220,320,460,680,1000



DESCRIPTION

TITANUS EP series consists of high-quality extreme pressure (EP) oils specifically formulated for the lubrication of industrial gear units operating under severe conditions. They incorporate a top-of-the-class sulfur/phosphorous additive system, free from lead compounds, to provide exceptional protection against wear and scuffing. TITANUS EP series demonstrate outstanding thermal and oxidation stability, high load-carrying capacity, and extended service life, ensuring reliable performance, reduced maintenance requirements, and long-term gear protection in demanding industrial applications.

APPLICATIONS

TITANUS EP series are suitable for closed industrial gears operating under shock loads and high load conditions. They are highly recommended for both large and small heavily loaded spur, bevel, spiral bevel, and helical gears lubricated by oil immersion or circulation systems. They are particularly well suited for gear drives in demanding industrial applications where reliable extreme-pressure performance, wear protection, and long service life are required, ensuring smooth and efficient operation even under severe operating conditions.

SPECIFICATIONS

| | | | |
|-----|--|-------------|-----------|
| DIN | 51517 Part 3 CLP (2008/11) | U.S. Steel | 224 |
| DIN | 51502 | David Brown | S1.53.101 |
| ISO | 6743-6 (ISO-L-CKB, ISO-L-CKC, ISO-L-CKD, ISO-L-CKG) | AGMA | 9005-E02 |

PROPERTIES

TITANUS EP series provide high film strength and excellent load-carrying capacity, delivering reliable protection under severe operating conditions. They feature extreme pressure performance, along with enhanced thermal and oxidation stability to ensure extended service life. The formulation offers high resistance to emulsion formation with rapid air release, while maintaining full compatibility with common seal materials for dependable system performance.

BENEFITS

TITANUS EP series provides effective protection of gear teeth against wear, surface distress, and premature failure, contributing to extended service life. They deliver superior anti-wear performance under boundary lubrication conditions, while minimizing deposit formation even during oxidative operation, ensuring cleaner systems and improved productivity. The formulation supports smooth system operation, offers reliable corrosion protection, and helps reduce oil leakage for enhanced equipment reliability.



TECHNICAL PRODUCT SHEET

PHYSICAL-CHEMICAL CHARACTERISTICS

| TITANUS EP | METHOD | ISO 68 | ISO 100 | ISO 150 | ISO 220 | ISO 320 | ISO 460 | ISO 680 | ISO 1000 |
|------------------------------------|------------|--------|---------|---------|---------|---------|---------|---------|----------|
| Density at 15°C, g/cm ³ | ASTM D4052 | 0.881 | 0.885 | 0.889 | 0.891 | 0.896 | 0.902 | 0.904 | 0.895 |
| Viscosity, Kinematic (cSt) 40°C | ASTM D445 | 68 | 100 | 150 | 220 | 320 | 460 | 680 | 952 |
| Viscosity, Kinematic (cSt) 100°C | ASTM D445 | 8.6 | 11.1 | 14.6 | 18.7 | 24.0 | 30.3 | 40.6 | 51.0 |
| Viscosity index | ASTM D2270 | 97 | 96 | 95 | 95 | 95 | 95 | 98 | 99 |
| Flash point, COC, °C | ASTM D92 | 230 | 240 | 256 | 260 | 268 | 280 | 300 | 300 |
| Pour point, °C | ASTM D97 | -18 | -18 | -15 | -15 | -15 | -15 | -18 | -18 |
| Copper corrosion | ASTM D 130 | 1b | 1b | 1b | 1b | 1b | 1b | 1b | 1b |
| Demulsibility, min. | ASTM D1401 | 10 | 10 | 20 | 20 | 20 | 30 | - | - |
| FZG gear scuffing test, A/8.3/90 | DIN 51354 | 12 | 12+ | 12+ | 12+ | 12+ | 12+ | 12+ | 12+ |
| FZG micropitting test @90°C | FVA 54-7 | 10 | 10+ | 10+ | 10+ | 10+ | 10+ | 10+ | 10+ |

The above mentioned characteristics represent mean values.

STORAGE

All packages must be stored in covered, well-ventilated areas. If outdoor storage cannot be avoided, barrels must be placed horizontally to prevent water ingress and to protect labels and markings from damage. Products must not be stored at temperatures above 60 °C and must not be exposed to direct sunlight, freezing conditions, or extreme temperature fluctuations.



HEALTH & SAFETY

This product is not considered to pose significant risks to health or safety when used as intended and in accordance with recommended personal hygiene practices. It must not be applied for purposes other than those for which it has been formulated. For detailed guidance on safe handling and use, refer to the Safety Data Sheet (SDS).



USED OILS

Used lubricants must be collected at designated collection points to prevent environmental contamination. They must not be mixed with solvents, brake fluids, or antifreeze.

