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TECHNICAL PRODUCT SHEET

# TITANUS EP R²

## ISO 220, 320

## DESCRIPTION

TITANUS EP R2 series consists of high-quality extreme pressure (EP) industrial gear oils formulated with carefully selected re-refined base oils and a proven sulfur/phosphorus additive system free of lead compounds. The balanced formulation delivers reliable protection against wear, scuffing, and surface fatigue, combined with high load-carrying capacity and robust film strength under severe operating conditions. The oils exhibit good thermal and oxidation stability, resistance to deposit formation, and compatibility with common seal materials, ensuring dependable long-term performance while supporting responsible and sustainable lubrication practices.

## APPLICATIONS

TITANUS EP R2 oils are suitable for closed industrial gear systems operating under shock and high load conditions. They are recommended for heavily loaded spur, bevel, spiral bevel, and helical gears lubricated by oil bath or circulation systems. The oils are well suited for use in a wide range of industrial applications, including gear drives operating under severe duty conditions, where dependable EP performance, wear protection, and durability are required to ensure reliable operation and extended equipment service life.

## 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 R2 series provide high film strength and excellent load-carrying capacity, combined with effective extreme pressure and anti-wear performance. They demonstrate good thermal and oxidation stability, strong resistance to emulsification, rapid air release, and full compatibility with common seal materials.

## BENEFITS

TITANUS EP R2 series offer effective protection of gear teeth against wear, surface distress, and premature failure, contributing to extended component service life. They support smooth system operation, help maintain clean gear systems, protect against corrosion, and deliver reliable performance while enabling the use of re-refined base oils to support environmental sustainability goals.

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## PHYSICAL-CHEMICAL CHARACTERISTICS

| TITANUS EP R2 | METHOD | ISO 220 | ISO 320 |
|---|---|---|---|
| Density at 15°C, g/cm$^3$ | ASTM D4052 | 0.891 | 0.896 |
| Viscosity, Kinematic (cSt) 40°C | ASTM D445 | 220 | 320 |
| Viscosity, Kinematic (cSt) 100°C | ASTM D445 | 20.4 | 25.8 |
| Viscosity index | ASTM D2270 | 108 | 105 |
| Flash point, COC, °C | ASTM D92 | 260 | 270 |
| Pour point, °C | ASTM D97 | -15 | -15 |
| Copper corrosion | ASTM D 130 | 1b | 1b |
| Demulsibility, min. | ASTM D1401 | 20 | 20 |
| FZG gear scuffing test, A/8.3/90 | DIN 51354 | 12+ | 12+ |
| FZG micropitting test @90°C | FVA 54-7 | 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.