



## Spartan™ EP Series

Mobil Industrial , 中国

Gear Oil

### Product Description

Spartan™ EP lubricants are a family of industrial extreme pressure gear lubricants. They are formulated with high quality mineral oils, which help reduce sludge formation helping to increase oil service life. Spartan EP oils contain a sulphur / phosphorus extreme pressure additive system that gives high load carrying ability and protection against wear. In addition these oils provide strong protection against corrosion of steel and copper containing alloys and resist foaming. Spartan EP oils have good water handling properties so that water rapidly separates from the oil for easy water elimination.

Spartan EP oils can be used in either splash or circulating systems. Spartan EP gear oils are suitable for use wherever industrial gear oil is required. Spartan EP grades are suitable for the lubrication of heavily loaded enclosed gear sets including spur, helical and bevel designs and provide protection in applications where shock loading occurs. Spartan EP may also be used in worm gears where specified. They may also be used for lubrication of plain bearings, and in rolling contact (anti-friction) bearings.

### Features and Benefits

Spartan EP gear oils offer the following benefits:

Spartan EP oils enjoy a reputation for quality and consistency, as well as the ability to handle a variety of tough gear applications. They are manufactured with high quality mineral stocks and a specially chosen additive system. Spartan EP lubricants are manufactured under the highest level of quality assurance and control in our modern blending facilities.

Features	Advantages and Potential Benefits
EP wear protection of gears and bearings	
Resistance to sludge formation leads to outstanding system cleanliness	
Very good oxidation resistance for long oil change life	
Very good demulsibility to ease water removal	

### Applications

Spartan EP gear oils are used in a wide range of industrial spur, helical, bevel and steel-on-steel worm gearing.

Specific applications include:

- Drives for conveyers, agitators, dryers, fans, mixers, presses, pulpers, pumps, screens, extruders, oil well pumps
- Industrial bearings- journal and rolling contact, especially operating at low speeds and high loads

### Specifications and Approvals

This product meets or exceeds the requirements of:	150	220	320	460
China GB 5903-2011, L-CKD	X	X	X	X

### Properties and Specifications

Property	150	220	320	460
Grade	ISO 150	ISO 220	ISO 320	ISO 460
Copper Strip Corrosion, 3 h, 100 C, Rating, ASTM D130	1A	1A	1A	1A
Density @ 15.6 C, kg/l, ASTM D4052	0.89	0.89	0.9	
EP Properties, Timken OK Load, lb, ASTM D2782	60	60	60	60
Emulsion, Time to Break, 82 C, min, ASTM D1401	30	30	30	30
FZG Scuffing, A/8.3/90, Fail Stage, Rating, DIN 51354	12+	12+	+12	12+
Flash Point, Cleveland Open Cup, °C, ASTM D92	230	240	240	240
Four-Ball Extreme Pressure Test, Load Wear Index, kgf, ASTM D2783	56	60	60	60
Four-Ball Extreme Pressure Test, Weld Load, kgf, ASTM D2783	300	300	300	300
Kinematic Viscosity @ 100 C, mm <sup>2</sup> /s, ASTM D445	14.7	19.0	24.1	30.6
Kinematic Viscosity @ 40 C, mm <sup>2</sup> /s, ASTM D445	150	220	320	460
Pour Point, °C, ASTM D97	-24	-24	-21	-15
Rust Characteristics, Procedure B, ASTM D665	Pass	Pass	Pass	Pass
Viscosity Index, ASTM D2270	97	97	97	96

### Health and Safety

Health and Safety recommendations for this product can be found on the Material Safety Data Sheet (MSDS) @ <http://www.msds.exxonmobil.com/psims/psims.aspx>

All trademarks used herein are trademarks or registered trademarks of Exxon Mobil Corporation or one of its subsidiaries unless indicated otherwise.

02-2022

ExxonMobil (China) Investment Co. Ltd  
17th Floor, Metro Tower  
30 Tian Yao Qiao Road  
Shanghai 2000030  
China

+86 21 24076000

<http://www.exxonmobil.com>

Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All products may not be available locally. For more information, contact your local ExxonMobil contact or visit [www.exxonmobil.com](http://www.exxonmobil.com)

ExxonMobil is comprised of numerous affiliates and subsidiaries, many with names that include Esso, Mobil, or ExxonMobil. Nothing in this document is

intended to override or supersede the corporate separateness of local entities. Responsibility for local action and accountability remains with the local ExxonMobil-affiliate entities.

**ExxonMobil**

Exxon

Mobil



© Copyright 2003-2024 Exxon Mobil Corporation. All Rights Reserved