# Eterna Gear Oils XP-SP

## *Premium quality industrial gear oils*

**Eterna XP-SP Gear Oils are premium quality, lead-free, extreme-pressure industrial gear oils formulated using high viscosity index, solvent refined, base oils and specially selected sulphur-phosphorus load additives, anti-foam, anti-oxidant and corrosion inhibitors to provide an extreme pressure performance significantly better than that provided by leaded gear oils. They are designed, primarily, for the lubrication of heavy-duty industrial gears. Their high load carrying capacity and anti-friction characteristics combine to offer superior performance in gears and other industrial applications.**

### Applications

- Steel gear transmissions
- Industrial gear drives where a full EP performance is required
- Bearings
- Circulating and splash lubricated systems

*Note: Not to be used for automotive hypoid gears.*

### Performance Features

- ***Excellent load carrying and anti-friction characteristics***
  Reduces gear tooth and bearing wear on both steel and bronze components

- ***Outstanding oxidation and thermal stability***
  Withstands high thermal loading and resists the formation of sludge and other harmful products of oxidation. Extended oil life, even with bulk oil temperatures up to 100°C in certain applications

- ***Effective corrosion inhibition***
  Protects both steel and bronze components, even in the presence of contamination by water and solids

- ***Lead-free***
  Operator acceptability -- Reduced health risk

- ***Wide range of viscosities***
  Caters for the most varied and arduous industrial applications

- ***Resistant to micro-pitting***
  Standard setting anti micro-pitting performance to reduce the risk of premature failure through surface distress

- ***Water shedding properties***
  XP-SP Oils have excellent water separation properties. Excess water can be drained easily from lubrication systems.

(Water can greatly accelerate surface fatigue on gears and bearings as well as promoting ferrous corrosion on internal surfaces. Water contamination should be avoided or removed as quickly as possible after the occurrence).

Meets
David Brown
BEW Gear
Flender Paramount
US STEEL 224
AGMA 250.04
DIN 51517, PART 3
And Other Industrial Gear Oil Specifications

### Change-over Procedures

The following procedures and precautions are recommended when changing oils - including leaded grades:-

As a general principle, oil that has been in use for some time should be renewed completely. For complete benefit, XP-SP Oils should not be mixed with other oils.

**Gearboxes**

Drain the gearbox completely and inspect internally. Remove any sludge deposits manually. Flush the gearbox with new oil. Drain and refill with the appropriate viscosity XP-SP Oil.

**Gear systems**
Drain off the old oil. The minimum amount of XP-SP Oil necessary to maintain circulation should be pumped around the system, for as long as practicable, to flush out all pipe work and inaccessible points. Use warm oil, if possible. Discard the flushing charge and, provided a careful inspection shows the lubrication system, including filters, drains and sumps to be free of contamination, refill with the appropriate viscosity XP-SP Oil. If the examination is not satisfactory, repeat the procedure.

For newer charges of leaded gear oil, an inspection as detailed should be carried out. If the system is found to be reasonably clean, top-up the existing oil with XP-SP Oil may be carried out observing the following safeguards:

1. Make top up by adding frequent small quantities, rather than occasional large charges.
2. Inspect the system regularly for an initial period of three months, particularly with regard to the cleanliness of filters. The inspection frequency may be extended gradually to normal manufacturers' recommended periods as long as conditions are satisfactory

## Health, Safety & Environment

Eterna XP-SP Oils are unlikely to present any significant HSE hazard when properly used in the recommended application whilst good industrial, personal hygiene and environmental standards are maintained.

Avoid contact with skin. Use impervious gloves with used oil. In the event of skin contact, wash immediately with soap and water.

Dispose used oil safely. Do not discharge into drains, soil or water.

## Advice

Advice on applications not covered in this leaflet may be obtained from the Lubricants Department, Eterna PLC, 5a Oba Adeyinka Oyekan Avenue, Ikoyi

Tel: 01-8981836, 8981842, 2691651

## Typical Physical Characteristics

| **Technical Data** | **68** | **100** | **150** | **220** | **320** | **460** |
|---|---|---|---|---|---|---|
| **Kinematic Viscosity** | | | | | | |
| @ 40°C cSt | 68 | 100 | 150 | 220 | 320 | 460 |
| 100°C cSt | 8.53 | 11.1 | 14.5 | 18.7 | 24.0 | 30.5 |
| **Viscosity Index** | 95 | 95 | 95 | 95 | 95 | 95 |
| **Density** @ 20°C | 0.885 | 0.885 | 0.89 | 0.895 | 0.9 | 09 |
| **Flash Point** °C COC | 240 | 249 | 249 | 249 | 255 | 255 |
| **Pour Point** °C | -15 | -15 | -15 | -15 | -12 | -6 |
| **Demulsibility, secs** | 240 | 300 | 210 | 270 | 330 | 360 |

These characteristics are typical of current production. Whilst future production will conform to ETERNA Specifications, variations in these characteristics may occur.