



Turbine Oil Symbol 2190 TEP was developed primarily as a circulating system oil for marine gear turbine sets, providing mild extreme pressure protection as well as resistance to rust, oxidation, corrosion, and foaming. The thermal and oxidation stability of Turbine Oil Symbol 2190 TEP allow it to withstand the high temperatures found in turbine bearing and gear lubrication. The foam inhibition of this formulation helps prevent the buildup of foam in the sump tank with possible vent pipe overflow. The stability, high viscosity index, and rust and corrosion inhibition help assure high film strength lubrication for gears and bearings, as well as rust and corrosion protection. Together, these qualities promote both long lubricant and equipment life. The extreme pressure properties enable Chevron Turbine Oil Symbol 2190 TEP to meet the requirements of MIL-PRF-17331J.

APPLICATIONS

- Marine turbine reduction gears, where heavy tooth loading and shock loads are encountered.
- Do not filter through Fuller's Earth-type filtration systems since this would deplete the additive package.
- Do not use in breathing air apparatus or medical equipment.
- Do not use in high pressure systems in the vicinity of flames, sparks and hot surfaces.
- Use only in well ventilated areas.
- Keep container closed.
- Always confirm that the product selected is consistent with the original equipment manufacturer's recommendation for the equipment operating conditions and customer's maintenance practices.

BENEFITS

- **Long lubricant life**
Selected base stocks and additives promote long lubricant life.
- **Gear and bearing protection**
Extreme pressure characteristics help provide high film strength to protect gears and bearings engaged in heavy-duty service.
- **MIL-PRF-17331J**
Approved against the stringent MIL-PRF-17331J military specification for Navy vessels and submarines.
- **Lubricant film strength**
High viscosity index promotes minimal viscosity change in broad operating temperature range, thereby enhancing lubricant film strength.

PERFORMANCE STANDARDS

U.S. Military	MIL-PRF-17331J (approved)
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TYPICAL CHARACTERISTICS

Product Code	3338
Density at 15°C, kg/L	0.87
Acid Number, ASTM D974, mg KOH/g	0.16
Colour, ASTM D1500	0.5
Conradson Carbon Residue, m%	0.1
Corrosion, Copper Strip, 3 h at 100°C	1
Flash Point, COC, °C	246
Pour Point, °C	-12
Sulfated Ash, m%	<0.001
Viscosity, Kinematic at 40°C, mm²/s at 100°C, mm²/s	79.8 9.7
Viscosity Index	99

PACK SIZES

208L

ENVIRONMENT, HEALTH AND SAFETY

Users should consult the MSDS, follow the precautions outlined and comply with all laws and regulations concerning its use and disposal. Used packaging material should not be incinerated or exposed to flame. After use, protect your environment. Do not pollute drains, soil or water with used product.

OTHER INFORMATION

For further information on Caltex products and services call the Lubelink Advisory Service on 1300 364 169 between 8.00 am and 6.00 pm (EST) Monday to Friday.

All reasonable care has been taken to ensure that the information contained in this publication is accurate at the time of printing. However, the information is liable to variation in the event of subsequent changes in the blend, formulation, method of storage, improper handling and usage etc.