

RECOMMENDED PLANETARY GEAR OIL

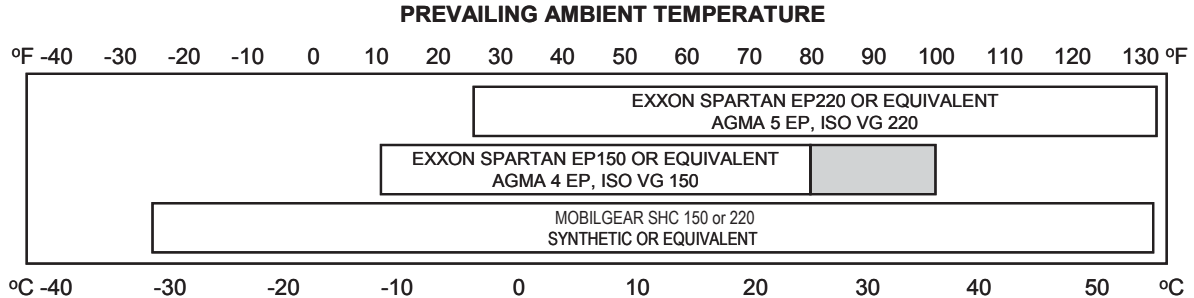
Field experience, supported by engineering endurance tests, indicates the use of the proper gear oil and a program of regular preventive maintenance will help provide extended gear train life and reliable hoist brake performance. For this reason, BRADEN has published the following specifications to assist in determining which lubricant is best suited to your application.

⚠ WARNING ⚠

Failure to use the proper type and viscosity of planetary gear oil may contribute to intermittent brake clutch slippage which could result in property damage, severe personal injury or death. Some gear lubricants contain large amounts of EP (extreme pressure) and anti-friction additives which may contribute to brake clutch slippage or damage to brake friction discs or seals. Oil viscosity with regard to ambient temperature is also critical to reliable brake clutch operation. Our tests indicate that excessively heavy or thick gear oil may contribute to intermittent brake clutch slippage. Make certain that the gear oil viscosity used in your hoist is correct for your prevailing ambient temperature.

For simplicity, BRADEN has listed available products in each temperature range that have been tested and found to meet our specifications. This is not to say that other lubricant brands would not perform equally as well.

If the following lubricant brands are not available in your area, make certain your lubricant vendor supplies you with oil that is equivalent to those products listed below.



i NOTE: SHADED TEMPERATURE RANGE IN THE CHART ABOVE NOT RECOMMENDED FOR SEVERE APPLICATIONS SUCH AS: OFFSHORE CRANES, SUSTAINED FAST DUTY CYCLES OR FREQUENT LIFTING.

Texaco Meropa 150, previously used as factory fill, may no longer be widely available due to current market conditions. As of mid-year 2002, planetary hoists are factory filled with Exxon Spartan EP150, or equivalent. The chart below relates the Texaco products to 4 currently available oils. Consult your oil supplier for other equivalent oils if required.

Texaco	Exxon	Mobil	Shell	Chevron
Meropa 150	Spartan EP 150	Mobilgear 629	Omala 150	Gear Compounds EP 150
Meropa 220	Spartan EP 220	Mobilgear 630	Omala 220	Gear Compounds EP 220

Unless otherwise specified, it is recommended that the gear oil be changed after the first one hundred (100) hours or two (2) months of machine operation, then every one thousand (1,000) hours or six (6) months, whichever occurs first. The gear oil should also be changed whenever the ambient temperature changes significantly and an oil from a different temperature range would be more appropriate.

(OVER)

A warm-up procedure is recommended at each start-up and is essential at ambient temperatures below +40°F (4°C).

The prime mover should be run at its lowest recommended RPM with the hydraulic hoist control valve in neutral allowing sufficient time to warm up the system. The hoist should then be operated at low speeds, raise and lower, several times to prime all lines with warm hydraulic oil and to circulate gear lubricant through the planetary gear sets.

 **WARNING** 

Failure to properly warm up the hoist, particularly under low ambient temperature conditions, may result in temporary brake slippage due to high back pressures attempting to release the brake, which could result in property damage, severe personal injury or death.

If you have any questions regarding this bulletin or your BRADEN planetary hoist, please contact the BRADEN Product Support Department at 1-918-251-8511, Monday through Friday from 08:00 to 16:30 hours CST, or by fax at 1-918-259-1575.