

BioGreen UltraGard Industrial Extreme Pressure Gear Oil

*Multi-Purpose Industrial Gear Lubricants
Blended to ISO Viscosity Specs
Meet AGMA Gear Oil Specifications*

DESCRIPTION

BioGreen UltraGard EP Gear Oils are heavy-duty extreme-pressure industrial gear lubricants blended from highly refined bases stocks and extreme pressure (EP) additives, plus rust, oxidation, and foam inhibitors. These oils are intended for use in industrial gear boxes where ISO EP gear oils are recommended.

BioGreen UltraGard EP Gear Oils are suitable for use in automotive applications where GL-4 gear oils are recommended, but are not intended for use in automotive and heavy duty differentials using offset spiral bevel (Ring & Pinion Hypoid) gear sets. Use GL-5 gear oils for those applications. EP and GL-4 gear oils are commonly used in industrial gear boxes and are excellent heat transfer fluids. These gear oils are non-foaming and compatible with all brass and bronze bearings and have excellent demulsibility properties.

BENEFITS

- ✓ Biodegradable;
- ✓ Compatible with petroleum oils - no flushing necessary;
- ✓ Readily recyclable;
- ✓ Provide a thick hydro-dynamic film between gears;
- ✓ Excellent film strength at high operating temperatures;
- ✓ Full EP treatment for extreme pressure protection;
- ✓ Excellent heat transfer properties to keep gear sets cool;
- ✓ Outstanding resistance to foaming;
- ✓ Prevents corrosion of copper and brass.

APPLICATION

- ✓ Industrial gear boxes where ISO EP or AGMA gear oils are recommended;
- ✓ Automotive and heavy duty transmissions up to GL-4 levels;
- ✓ Gear reducers;
- ✓ Oilfield pumping units



HEALTH SAFETY This product is not classified as hazardous under OSHA definition, simply wash with soap and water after handling. Health & Safety information is printed in the MSDS sheet available on request. This product should not be used for purposes other than its intended use. Typical properties may vary slightly due to product research & development, information may change without notification.

PERFORMANCE LEVELS	AGMA	9005-E02 (5EP), Clean S-200 Oxidation
	DIN	51 517 Part 3
	General Motors	LS-2 Pass 12, pass 13
	FZG	S1.53.101 (5e)
	David Brown	Landis P-74 (C-220)
	Cincinnati U.S. Steel	224
	API	GL-3, GL-4 Extreme Pressure Gear Oils

TYPICAL PROPERTIES	ISO (ASTM) Grade AGMA Grade	68	100	150	220	320	460	680
Specific Gravity at 15.6 °C	D 1298	0.875	0.881	0.882	0.886	0.892	0.889	0.890
Viscosity cSt @ 40 °C	D445	70.0	100.0	150.0	220.0	310.0	440.0	680.0
Viscosity cSt @ 100 °C	D445	8.9	11.0	14.5	22.1	23.6	29.3	35.0
Viscosity Index	D2270	100	100	95	121	96	85 80	
Pour Point °C	D97	-37	-28	-28	-15	-21	-18	-1
Flash Point, Coc °C	D92	235	243	243	232	232	254	254
Timken Load - Min.	D2586	70	70	70	70	70	70	70
Four-ball Weld Load	D2266	250	250	250	250	250	250	250
Four-ball Wear (MM.)	D5182	0.35	0.35	0.35	0.35	0.35	0.35	0.35
FZG (Pass load stage)	D130	12	12	12	12	12	12	12
Copper Corrosion	D2711	1A	1A	1A	1A	1A	1A	1A
Demulsibility								
- Free Water		85	85	85	85	85	85	85
- Water In Oil		0.6	0.6	0.6	0.6	0.6	0.6	0.6
- Emulsion		0	0	0	0	0	0	0
AGMA		2EP	3EP	4EP	5EP	6EP	7EP	8EP