

# PRODUCT INFORMATION

A PRODUCT OF AMERICAN CHEMICAL TECHNOLOGIES, INC.



## EcoGear<sup>®</sup> XP Series

### *Synthetic Gear and Bearing Lubricants*

#### DESCRIPTION:

**EcoGear<sup>®</sup> XP Series** are fully formulated, extreme-pressure lubricants for enclosed industrial gears. They are formulated to provide excellent lubrication, stability, and extended service life while eliminating many of the problems commonly encountered with petroleum gear lubricants. **EcoGear<sup>®</sup> XP Series** takes advantage of the many inherent advantages of polyalkylene glycol-base fluids as well as those of the superior additive package developed and proven as a zero wear gear lubricant using technology of aerospace engineering. The result is a superior gear lubricant that provides cost savings to the end user.

**EcoGear<sup>®</sup> XP Series** possess superior operating characteristics providing reduced operating temperatures, reduced friction, and very little wear. They are noncorrosive to metal surfaces and possess extreme-pressure properties. Their excellent thermal and oxidative stability eliminates the need for frequent changeover due to premature oxidation of petroleum gear oils. **EcoGear<sup>®</sup> XP Series** exhibit excellent viscosity-temperature properties with viscosity indexes exceeding 200. This eliminates the need for seasonal changeover due to climatic temperature changes and allows wider operating temperature ranges than permissible with petroleum oils. Due to the high viscosity index exhibited by **EcoGear<sup>®</sup> XP Series**, they are not classified by one AGMA viscosity rating. **EcoGear<sup>®</sup> XP Series** will effectively span 2 or 3 AGMA petroleum lubricants over the operating range of most gearboxes.

#### BENEFITS:

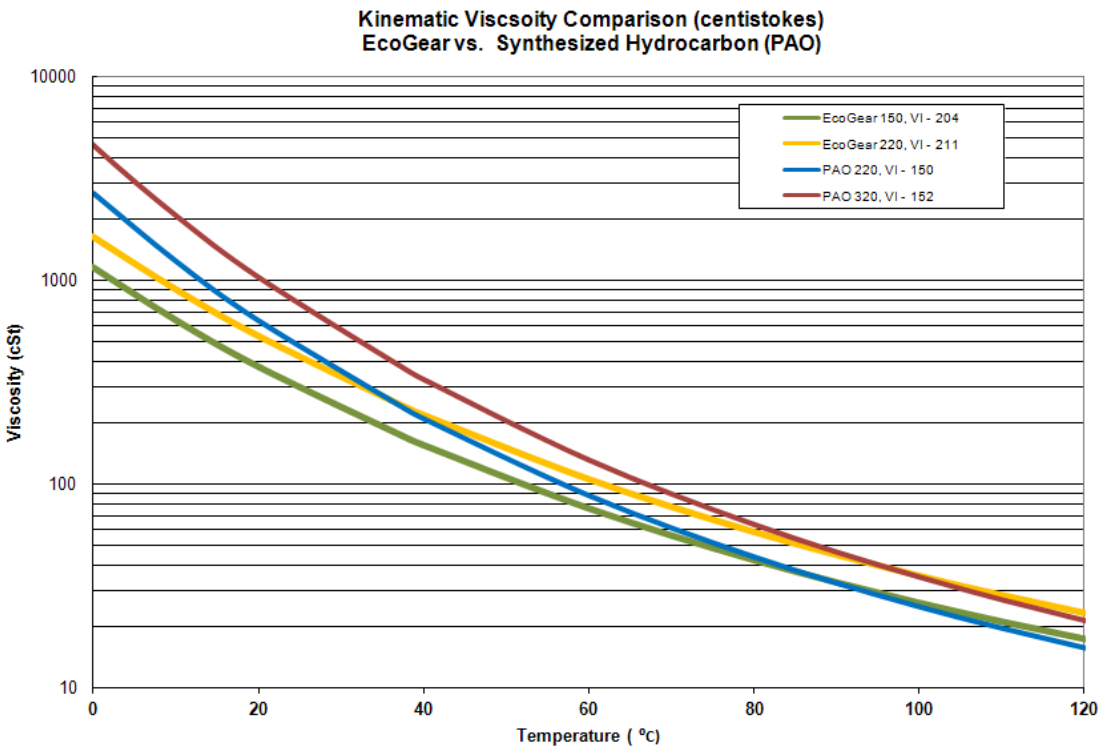
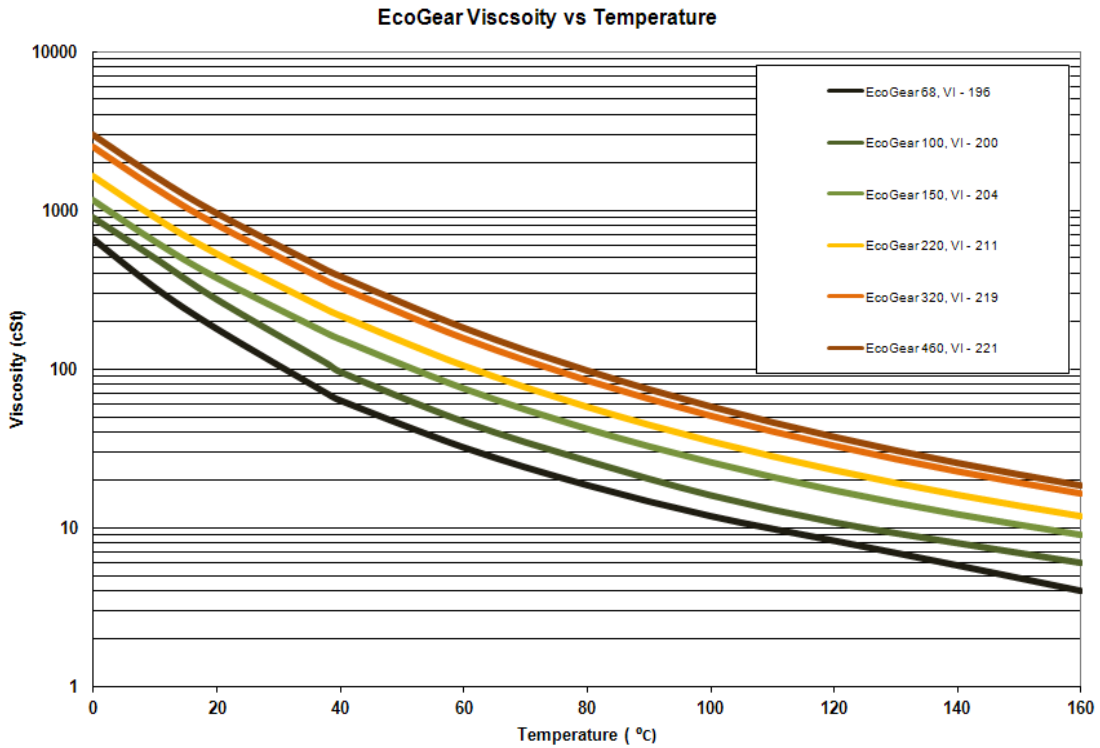
- Reduced energy consumption
- Extended service life
- Reduced lubricant and maintenance costs
- Reduced wear rates
- Elimination of sludges and carbonaceous residues
- High Viscosity Index
  - Eliminates seasonal oil changeovers
  - Facilitates cold-weather startups
  - Eliminates motor overloading during startup

#### STORAGE AND HANDLING:

We believe **EcoGear<sup>®</sup> Series** has a low degree of hazard when used as intended. As with all products of this type, we recommend that good hygiene practices be observed, including: (1) avoid prolonged skin contact, (2) provide adequate ventilation, (3) do not ingest; and that all OSHA Standards pertaining to products of this type are observed.

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## VISCOSITY COMPARISONS:



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## PROPERTIES:

	<b>Test Method</b>	<b>EG68XP</b>	<b>EG80XP</b>	<b>EG100XP</b>	<b>EG150XP</b>	<b>EG220XP</b>	<b>EG320XP</b>
Appearance		Clear Pale Yellow	Clear Pale Yellow	Clear Pale Yellow	Clear Pale Yellow	Clear Pale Yellow	Clear Pale Yellow
Viscosity @ 40 °C	ASTM D445	68 cSt	87 cSt	110 cSt	155 cSt	216 cSt	319 cSt
Viscosity @ 100 °C	ASTM D445	13 cSt	14 cSt	20 cSt	26 cSt	34 cSt	45 cSt
Viscosity @ 100 °F	ASTM D445	280-380 SUS	360-410 SUS	500-600 SUS	800 SUS	900-1100 SUS	1600-1800 SUS
Viscosity Index	ASTM D2270	196	197	200	204	211	219
Pour Point	ASTM D97	-39 °C (-38 °F)	-35 °C (-31 °F)	-34 °C (-30 °F)	-31 °C (-24 °F)	-28 °C (-18 °F)	-23 °C (-11 °F)
Specific Gravity	ASTM D1298	0.99	1.00	1.00	1.00	1.01	1.01
Flash Point	ASTM D92	198 °C (388 °F)	201 °C (394 °F)	203 °C (397 °F)	208 °C (406 °F)	215 °C (419 °F)	223 °C (433 °F)
Fire Point	ASTM D92	229 °C (570 °F)	299 °C (570 °F)	299 °C (570 °F)	299 °C (570 °F)	300 °C (572 °F)	304 °C (579 °F)
Turbine Oil Stability Test	ASTM D943					1495 h	
EP Properties (Four-Ball Method)	ASTM D2783						
Weld Load		300 kgf	300 kgf	300 kgf	315 kgf	400 kgf	400 kgf
Load-Wear Index					88 kgf		
OK Load (Timken Method), min.	ASTM D2509	100 lb-f	100 lb-f	100 lb-f	100 lb-f	90 lb-f	90 lb-f
FZG A/8.3/90	ASTM D-5182 DIN 51354				14 (3mg)	14+	14+
FZG Micropitting Test @ 90°C, Pass Stage	FVA 54/7						

The information contained herein is correct to the best of our knowledge. The recommendations or suggestions contained in this bulletin are made without guarantee or representation as to results. We suggest that you evaluate these recommendations and suggestions in your own laboratory prior to use. Our responsibility for claims arising from breach of warranty, negligence, or otherwise is limited to the purchase price of the material. Freedom to use any patent owned by American Chemical Technologies' or others is not to be inferred from any statement contained herein.