

# OIL TECH

*The Lubrication Specialists*

## TECHNICAL DATA SHEET

### BIO TECH GEAR EP

#### PRODUCT DESCRIPTION

**BIO TECH GEAR EP** oils are readily biodegradable extreme pressure gear lubricants designed to replace mineral industrial gear oils and mobile plant gear oils within AGMA EP ratings.

Expect lower operating temperatures compared to normal mineral oils.

Excellent thermal and oxidation stability will provide longer service life.

At > 90% biodegradable **BIO TECH GEAR EP** exceeds the requirements of highly regarded German Blue Angel Scheme requiring > 80% biodegradable. Meets CEC-L-33-A-94 test standard.

This product is compatible with mineral oils, however we recommend flushing with **BIO TECH GEAR EP** oils with the first oil change.

Available in ISO grade 220 & 320

#### PERFORMANCE

- Readily Bio-degradable > 90%
- Superior oxidation stability
- High viscosity index
- Industrial AGMA EP lubrication
- Rust and corrosion protection
- Ultra-low toxicity
- Compatible with mineral Oils

## BIO TECH GEAR EP

### TYPICAL INSPECTION

Property		EP 220	EP320
ISO Grade		220	320
Recommended for AGMA No		5EP	6EP
Viscosity @ 40°C cSt	ASTM D445	220	320
Viscosity Index	ASTM D2270	196	198
Biodegradability %	CEC-L-33-A-94	>90	>90
Flash Point °C	ASTM D92	>260	>260
Pour Point °C	ASTM D97	-12	-12
FZG Load Stage	DIN 51354	12	12
Timken OK Load		>28kg	>28 kg
Copper Corrosion	ASTM D4048	1A	1A
Rust Test A & B	ASTM D665	Pass	Pass
Suggested Operating Range		0°C-80°C	0°C-80°C
Aquatic Toxicity, Fathead Minnow, LC50, 48hrs, ppm	EPA-821-R-02-012	>5000	>5000

**BIO TECH GEAR EP** is compatible with petroleum industrial gear oils. Natural cleaning properties ensure varnish and residue do not build up. However, existing residue from petroleum oils may be dissolved with its first use and halving the oil change interval is recommended for the first use only.

## BIO TECH GEAR EP

<b>Material Code</b>	<b>Compound</b>	<b>Compatibility</b>
NBR	Nitrile*, Buna N	ACCEPTABLE
HNBR	Hydrogenated Nitrile	ACCEPTABLE
EPDM, EPR	Ethylene, Propylene	ACCEPTABLE
FKM	Fluorocarbon, Viton	ACCEPTABLE
FKM	Hiflour	ACCEPTABLE
FFKM	Perfluoroelastomer	ACCEPTABLE
FPEM	Propylene	UNKNOWN
CR	Neoprene/Chloroprene	ACCEPTABLE
SBR	Styrene-Butadiene	UNSATISFACTORY
ACM	Polyacrylate	ACCEPTABLE
AU, EU	Polyurthane	ACCEPTABLE
BR	Butyl	ACCEPTABLE
BR	Butadiene	UNSATISFACTORY
IR	Isoprene	UNSATISFACTORY
NP	Natural Rubber	UNSATISFACTORY
CSM	Hypalon	ACCEPTABLE
FVMG	Fluorosilicone	ACCEPTABLE
MQ VMQ PVMQ	Silicone	UNSATISFACTORY
TFE	Teflon	ACCEPTABLE
	Nylon	ACCEPTABLE