Liquid Boron Gear Lubricant

ISO Grade: 220 & 320

A Boron Lubricants, LLC product

Product Description:

Liquid Boron Gear Lubricant is specially formulated to reduce internal friction through a patented lubrication additive. This unique formulation forms a multi-layered platelet film on metal surfaces which has very low sliding friction between layers. Even though the individual layers slide easily over each other, any given layer provides a unique protection approaching that of diamond hardness. This combination of strong individual layers with low internal friction gives a number of special benefits, such as excellent anti-wear and micropitting protection combined with energy efficiency. Unlike other low-friction technologies which rely on solid nanoparticles dispersed in oil, the Liquid Boron additive is completely soluble in the lubricant.

The unique Liquid Boron additive works to quickly establish the bonded surface and begin reducing friction. The surface film inhibits sludge, gum, and varnish formation. Reduced friction, coupled with a cleaner gearbox, allows for better heat transfer and reduced operating temperature. The Liquid Boron Gear Lubricant promotes longer gear and bearing life, as well as extended lubricant life.

Performance Benefits:

- **Sustains lower friction on gears and bearings**
- **Reduces gear drag and gear mesh friction**
- **Reduces oxidation and varnish deposits through the bonded surface**
- **Eliminates dry starts**
- **Absorbs shock and protects against micropitting**
- **Provides excellent rust and corrosion**
- **Has excellent thermal stability**
- **Provides heavy duty durability**
- **Separates water quickly at both higher and lower temperatures**

Applications:

Liquid Boron Gear Lubricant 220 is recommend for all stationary, enclosed industrial gearboxes especially those requiring a lubricant meeting the specifications of:

- **AGMA 9005-F AS**
- **AIST (US Steel) 224**

Packaging:

Pails, Drums, and Totes.

Properties and Specifications:

Test Description	Typical Properties	Typical Properties
ISO Grade	ISO 220	ISO 320
Viscosity Index	95	95
Viscosity cSt @ 40°C	220	320
Viscosity cSt @ 100°C	18.75	23.95
Liquid Boron Minimum Coefficient of Friction (ASTM G99 with sliding distance 360 m)	0.009	0.009
Pour Point °F (°C)	-5° F (-21° C)	0° F (-18° C)
Flash Point °F (°C) (ASTM D92)	421° F (216° C)	421° F (216° C)
Boron (B) Melting Point ° F (°C)	3768° F (2076° C)	3768° F (2076° C)
Modified Test using Pin and Vee Block Machine (ASTM D5620 Modified 200 lb)	3.5 hours-no re-lubrication, No failure	3.5 hours-no re-lubrication, No failure
Solids	None	None
AGMA 9005-F 16 AS	Meets	Meets
ISO 12925-1	CKC/CKD	CKC/CKD
US Steel 224	Meets	Meets
FE-8 Bearing Test	Pass	Pass
4 Ball Wear (20 kg)	0.266	Pass
FZG (ISO 14635-1)	Pass 12	Pass 12
Load Weld Index, kg (ASTM D2783)	57	57
Timken OK Load, lbs	70	70

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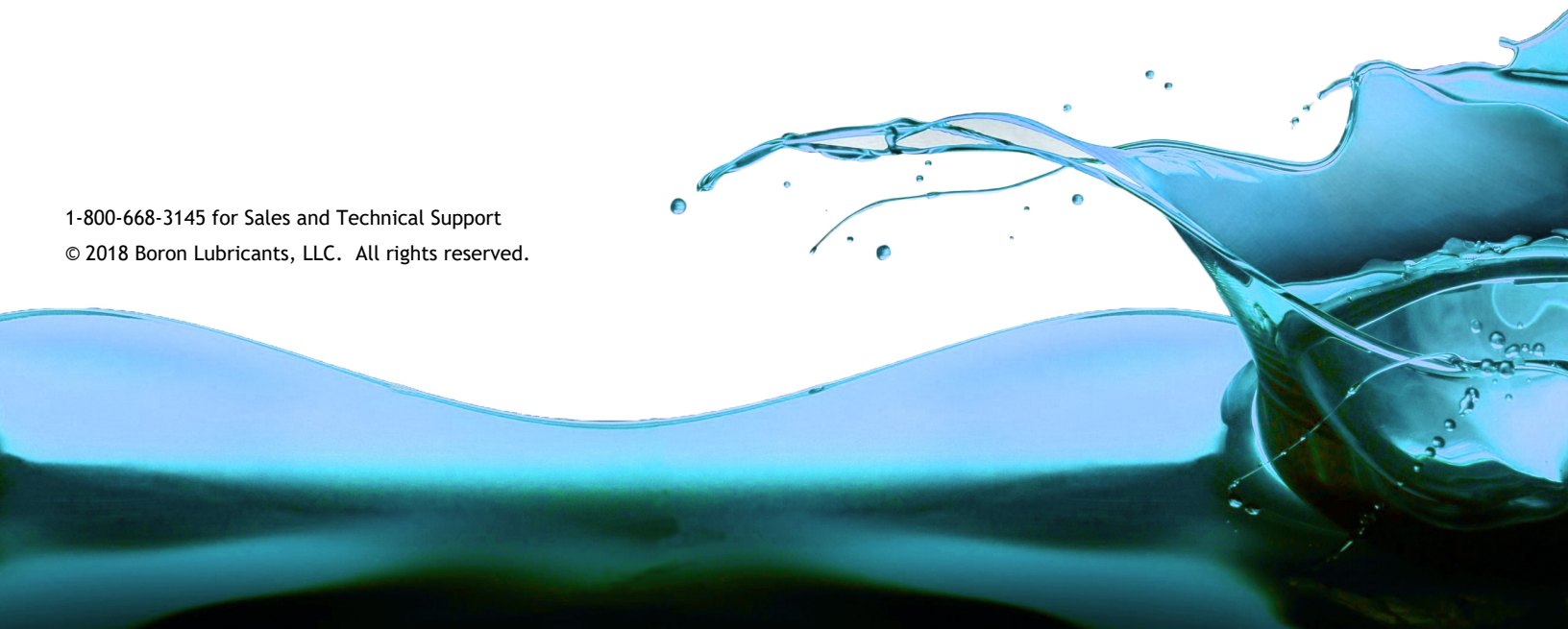
For additional information, go to www.boronlubricantsllc.com

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.

Health and Safety

Liquid Boron Gear Lubricant is not intended for use other than intended. SDS is available upon request. When disposing of the used product follow local environmental regulations.

Contact your Boron Lubricants representative for more information on Boron Lubricants' products or to place an order.



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