

## TECHNICAL DATA SHEET





# **ALL-PURPOSE LUBRICANT**

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Graphenoil All Purpose Lubricant is a multi-use lubrication. Utilizing a newly discovered single atomic layer of Graphite called Graphene, it is known as the "wonder material." In the purest form, Graphene is the lightest and thinnest, strongest, and most durable, most impermeable, and highest thermally conductive material known to exist. Graphene also has the highest lubricity or lowest coefficient of friction of any material.

Due to the specific properties of Graphene, Graphenoil All Purpose Lubricant offers better corrosion protection, lower coefficient of friction, and temperature stability than alternative lubricants. Graphenoil All Purpose Lubricant uses full synthetic materials including a ceramic reinforced fluoropolymer that increases the durability of lubrication, making Graphenoil slicker and more durable, thereby providing a longer lasting benefit. Fluoropolymers are a unique class of plastics known for their excellent heat and chemical resistance. They consist of a chain of carbon atoms surrounded by fluorine. The carbon fluorine bond is one of the strongest chemical bonds known. Fluoropolymers are used in a wide range of applications in chemical process, electronics, and life science industries.

Graphenoil includes the addition of Boron Nitride to the synthetic Fluoropolymer Polytetrafluoroethylene (better known as PTFE. An example of PTFE is Teflon, a brand of Dupont). Boron Nitride is the only material known to fully reinforce PTFE. An ASTM 4 Ball Wear Test (an industry standard test that measures the wear protection of a fluid on a metal surface), a 15% increase is seen, when using Boron Nitride PTFE over standard PTFE.

## **APPLICATIONS**

For use as an al-purpose lubricant: hobies, bicyces, firearms, hinges, bearings, nuts & bolts, automotive, crafts, knives, etc.

#### PHYSICAL PROPERTIES

ASTM D4052 At 20°C 0.8435

at 30°C 0.8393

ASTM D1903 4.95E-04°C-1

ASTM D7688 Lubricity, Major Axis, µm 492

Lubricity, Minor Axis, µm 450

Lubricity, Wear Scar Diameter, µm 47

Test Temperature, °C 60

Base Number, mg KOH/g 24.5

ASTM D4172 .407MM

## METHOD OF USE

Treat current oil system according to manufacturer's specifications and owner's manual. \*Do not overfill.

## STORAGE & HANDLING

Keep container closed until use. Keep out of direct sunlight and heat. Discard waste appropriately.

## NOTES

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