

TECHNICAL DATA SHEET



ALL-PURPOSE LUBRICANT

UPDATED 11/03/2021

DESCRIPTION

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

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof.

In light of the foregoing, Graphenoil specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Graphenoil products. Graphenoil specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.

The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Graphenoil patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

TRADEMARK USAGE

Except as otherwise noted, all trademarks in this document are trademarks of Graphenoil in the USA and elsewhere. [®] denotes a trademark registered in the U.S. Patent and Trademark Office. Any and all Graphenoil marks may not be used without prior consent.

16310 HOLLISTER ST. HOUSTON, TX 77066



832.666.3143 | WWW.GRAPHENOIL.COM