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**Attention: Editor**  
**September 14, 2020**  
**PRESS RELEASE**



## **Cortec® EcoLine® ELP Offers More Than Just Environmental Advantages Over Petroleum-Based Competition!**

End users are often skeptical about the performance of biobased or sustainable products. While industries have been repeatedly told to act responsibly, they may still wonder if the environmental benefits will outweigh any losses in performance or cost. When it comes to EcoLine® ELP, a biobased, all-purpose lubricant/penetrant, the benefits go beyond the environmental advantages in comparison to the petroleum-



based competition. To demonstrate and help potential users weigh the pros and cons, EcoLine® ELP was

tested against three major name brand lubricants: WD-40<sup>®</sup>, LPS 2<sup>®</sup>, and CRC 3-36<sup>®</sup>. In the end, EcoLine<sup>®</sup> ELP offered more than just environmental benefits.

### EcoLine<sup>®</sup> ELP Shows Better Extreme Pressure Performance

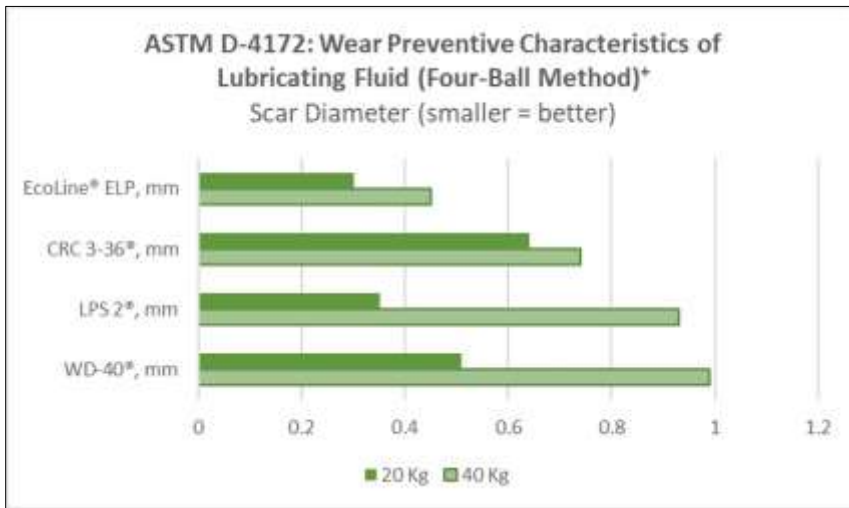
When tested according to the ASTM D-3233 Falex Pin and Vee Block Test, which demonstrates the extreme pressure properties of lubricants, EcoLine<sup>®</sup> ELP was able to hold up under a much heavier load than the other lubricants while avoiding scarring. Compared to WD-40<sup>®</sup> and CRC 3-36<sup>®</sup>, it was able to withstand nearly four times the load; compared to LPS 2<sup>®</sup>, it was able to withstand nearly 10 times the load. Coefficient of friction for EcoLine<sup>®</sup> ELP was also significantly lower than the competition—as low as one-eighth that of LPS 2<sup>®</sup>.

<b>ASTM D-3233: Measurement of Extreme Pressure Properties of Fluid Lubricants</b> <i>(Falex Pin and Vee Block Methods)<sup>+</sup></i>				
<b>Parameter</b>	<b>EcoLine<sup>®</sup> ELP</b>	<b>WD-40<sup>®</sup></b>	<b>CRC 3-36<sup>®</sup></b>	<b>LPS 2<sup>®a</sup></b>
<b>Final Load, lb</b>	4500	1004	1190	498
<b>Steel Pin</b>	Fairly Smooth	Scarred	Scarred	Scarred
<b>V Block</b>	Smooth	Scarred	Fairly Scarred	Scarred
<b>Coefficient of Friction</b>	0.04	0.24	0.17	0.32
<b>Tooth Count</b>	1405	398	481	211

<sup>a</sup> Test failed. Unable to maintain load.

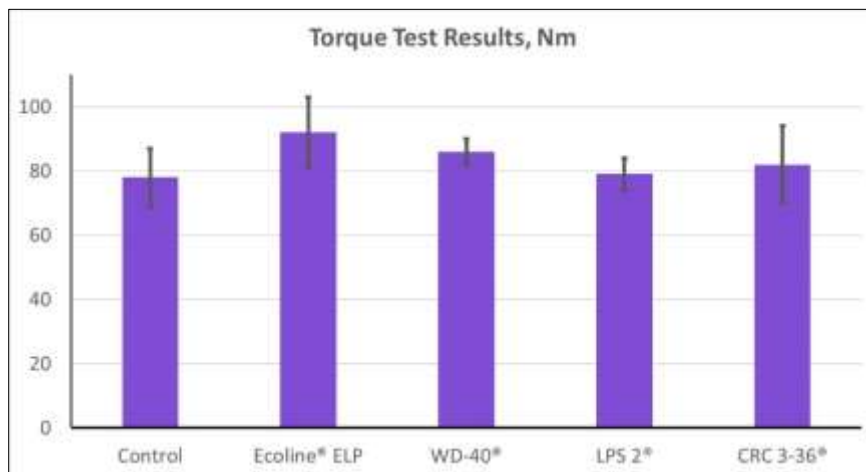
### EcoLine<sup>®</sup> ELP Shows Better Four-Ball Wear Performance

When tested according to ASTM D-4172 Wear Preventive Characteristics of Lubricating Fluid (Four-Ball Method), EcoLine<sup>®</sup> ELP showed a much smaller scar diameter than the three other products.



### EcoLine® ELP Shows Comparable Corrosion Protection and Loosening Effect

Another important use for all-purpose lubricants is to loosen parts that have rusted in place. EcoLine® ELP and the three other products were tested by applying them to rusty nuts and bolts and leaving them to sit for 15 minutes. Then they were unscrewed, and the torque was measured. EcoLine® ELP fell into close range with the performance of the competition. Also, although corrosion protection is not the main purpose of EcoLine® ELP, parts treated with it passed more than 3000 hours corrosion-free in 100% humidity at 50 °C (122 °F) (ASTM D-1748), comparable to the competition.



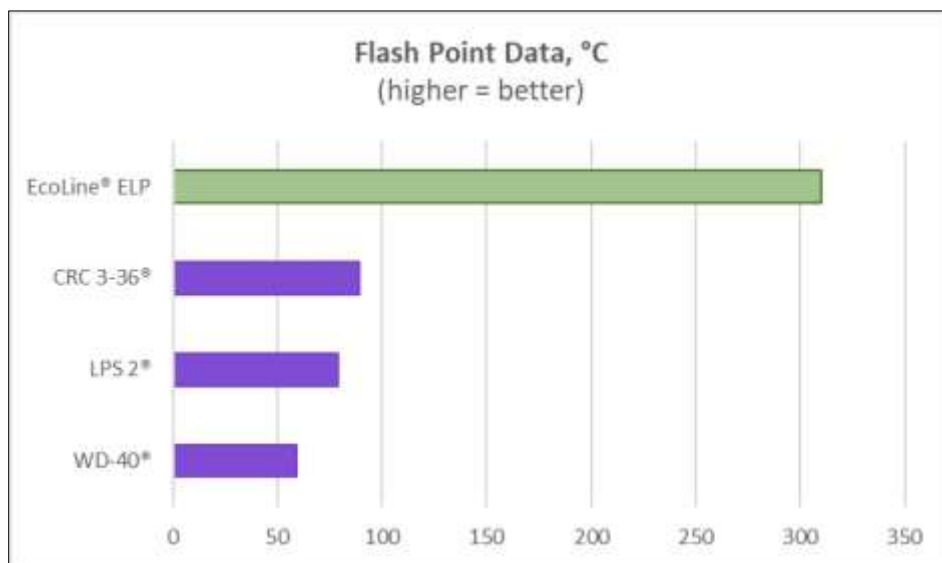
### EcoLine® ELP Shows Favorable Environmental and Safety Benefits

Performance aside, EcoLine® ELP has several environmental and safety advantages. As a USDA Certified Biobased Product, it contains 95% USDA certified biobased content, unlike its petroleum-based

competitors. It is a qualified product under the mandatory federal purchasing initiative of the USDA BioPreferred® Program.\* EcoLine® ELP is formulated from renewable natural seed oils and select additives and is readily biodegradable. It is not classified as a GHS hazard. It is non-flammable.



If desired, EcoLine® ELP may be packaged in Cortec’s line of EcoAir® cans for convenient spray can application. EcoAir® spray technology enables spraying without using flammable and VOC-laden propellants. Due to the non-flammable nature of EcoLine® ELP lubricant liquid, EcoAir® ELP is a non-flammable, much safer aerosol choice than traditional spray technology.



Considering all the advantages of using a biobased, biodegradable product like EcoLine® ELP that competes with the performance and cost of traditional products, could it be time to start doing the job with a sustainable all-purpose lubricant/penetrant?

Contact Cortec® to learn more and order your supply of EcoLine® ELP:

<https://www.cortecvci.com/contact-us/>

Learn more about EcoLine® ELP here:

[https://cortecvci.com/Publications/PDS/EcoLine\\_ELP.pdf](https://cortecvci.com/Publications/PDS/EcoLine_ELP.pdf)



*LPS 2® is a registered trademark of Illinois Tool Works. WD-40® is a registered trademark of WD-40 Company. CRC® and 3-36® are registered trademarks of CRC Industries, Inc.*

*\*For more information, go to <https://www.biopreferred.gov>. Aerosol versions not official USDA Certified Biobased Products.*

*+ ASTM D-4172 and ASTM D-3233 tests performed at Engineered Lubricants, 11525 Rock Island Court, Maryland Heights, MO 63043. Tel: 314/872-9540.*

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