

May 26, 2022 Cosmo Oil Lubricants Co., Ltd. Cosmo Energy Holdings Co., Ltd.

Cosmo to Commercialize Japan's First Biomass Mark-labeled Diesel Engine Oil COSMO DIESEL CARBONEUT 10W-30

Cosmo Oil Lubricants Co., Ltd., a member of the Cosmo Energy Group, announced that it has obtained Biomass Mark (Biomass Degree: 80%)¹⁾ certification for its in-house developed bio-based diesel engine oil COSMO DIESEL CARBONEUT 10W-30. Containing over 80% plant-derived base oil, the new lubricant is the first diesel engine oil in Japan to gain this certification.

Cosmo Oil Lubricants is aggressively developing new plant-based lubricating oils that contribute to carbon neutrality and reduced carbon dioxide (CO2) emissions, with the aim of achieving targets set out in the Cosmo Group's 2050 Carbon Net Zero Declaration.

The company developed this latest product as part of efforts to conserve petroleum resources and reduce greenhouse gases emitted during the oil disposal process. Whereas CO2 is normally produced when waste lubricating oil is incinerated, the new lubricant's plant-derived base oil absorbs CO2 during the growth process. This helps minimize the increase in atmospheric CO2 over the products's entire life cycle, resulting in lower CO2 emissions compared to conventional petroleum-based lubricants.

Trial production runs have already been completed as Cosmo Oil Lubricants prepares to begin in-house manufacturing of the new lubricant ahead of its scheduled launch in August of this year. With engine tests having demonstrated that it performs just as well as currently marketed highest-grade synthetic diesel engine oils, the company is looking to team up with leading user companies to test the product in actual vehicles.

Cosmo Oil Lubricants positions lubricants formulated with plant-derived base oils as part of its CARBONEUT Series, and is committed to developing and commercializing various new bio-based products for automotive, agricultural, and industrial applications.

1) The Biomass Mark, certified by the Japan Organics Recycling Association, is a logo that appears on the labels of eco-friendly products made from plant-derived materials (biomass), and which comply with all laws, standards and specifications related to product quality and safety. https://www.jora.jp/biomassmark/



Characteristic values of COSMO DIESEL CARBONEUT 10W-30

(Plant-derived base oil content: Over 80%)

Testing Requirements		CARBON DIESEL CARBONEUT
SAE Viscosity grade		10W-30
Flash point	$^{\circ}$ C	240
Density (15°C)	g/cm ³	0.864
Color (ASTM)		L3.0
Kinematic viscosity (40°C)	mm²/s	60.0
(100℃)	mm²/s	10.0
Viscosity index		154
Pour point	$^{\circ}$ C	-30.0
Sulphated ash	mass %	1.0
Total acid number	mg KOH/g	2.7
Total base number (Hydrochloric acid titration)	mg KOH/g	7.3

^{*}Characteristic values are subject to change without notice as a result of product modification. (as of May 2022)

(The official language for Cosmo Energy Group's filings with the Tokyo Stock Exchange and Japanese authorities, and for communications with our shareholders, is Japanese. We have posted English versions of some of this information on this website. While these English versions have been prepared in good faith, Cosmo Energy Group does not accept responsibility for the accuracy of the translations, and reference should be made to the original Japanese language materials.)

[Contact details for inquiries]

Public Relations Group, Corporate Communication Department Cosmo Energy Holdings Co., Ltd. TEL +81-3-3798-3101 FAX +81-3-3798-3841