



# Aviation industry

High performance  
lubricants for all  
applications

Dedicated solutions  
to enhance your  
productivity



**TotalEnergies**

# Summary

---

- Aviation industry
- Our complete range of aviation lubricants
- The benefits offered by TotalEnergies lubricants : LubAnac & aviations fuels
- Five good reasons for choosing TotalEnergies Lubrifiants

# Aviation industry

Discover our complete  
range of aviation lubricants  
and services operations



PISTON ENGINES LUBRICANTS

	PRODUCTS	SPECIFICATIONS*	APPLICATIONS
NON DISPERSIVE	<b>Aero 80</b>	<ul style="list-style-type: none"><li>FRANCE: AIR 3560/D grade SAE 40</li><li>US, UK: SAE J 1966 SAE grade 40</li></ul>	Pure mineral oils for the lubrication of piston engines operating under average conditions.
	<b>Aero 100</b>	<ul style="list-style-type: none"><li>FRANCE: AIR 3560/D grade SAE 50</li><li>US, UK: SAE J 1966 SAE grade 50</li></ul>	Lubrication of vintage aeroplanes (WWI and WWII warplanes).
	<b>Aero 120</b>	<ul style="list-style-type: none"><li>US: SAE J 1966 grade SAE 60</li></ul>	
DISPERSIVE	<b>Aero D 80</b>	<ul style="list-style-type: none"><li>FRANCE: AIR 3570 grade SAE 40</li><li>US, UK: SAE J 1899 SAE grade 40</li></ul>	Ashless dispersive monograde mineral oils for the lubrication of piston engines operating under severe and very severe conditions.
	<b>Aero D 100</b>	<ul style="list-style-type: none"><li>FRANCE: AIR 3570 grade SAE 50</li><li>US, UK: SAE J 1899 SAE grade 50</li></ul>	
	<b>Aero D 120</b>	<ul style="list-style-type: none"><li>FRANCE: AIR 3570 grade SAE 60</li><li>US, UK: SAE J 1899 SAE grade 60</li></ul>	New generation ashless dispersive monograde mineral lubricants, specially developed to improve anti-wear and corrosion protection of your highly valued piston aviation engine.
	<b>Aero XPD 80</b>	<ul style="list-style-type: none"><li>FRANCE: AIR 3570 grade SAE 40</li><li>US, UK: SAE J 1899 SAE grade 40</li><li>FAA approved AD 80-04-03R2 paragraph b.1</li><li>AVCO LYCOMING (310F) approved</li></ul>	
	<b>Aero XPD 100</b>	<ul style="list-style-type: none"><li>FRANCE: AIR 3570 grade SAE 50</li><li>US, UK: SAE J 1899 SAE grade 50</li><li>FAA approved AD 80-04-03R2 paragraph b.1</li><li>AVCO LYCOMING (310F) approved</li></ul>	These oils already contain an anti-wear additive similar to TEXTRON Lycoming LW 16702.
	<b>Aero XPD 120</b>	<ul style="list-style-type: none"><li>FRANCE: AIR 3570 grade SAE 60</li><li>US, UK: SAE J 1899 SAE grade 60</li><li>FAA approved AD 80-04-03R2 paragraph b.1</li><li>AVCO LYCOMING (301F) approved.</li></ul>	
	<b>Aero DM 15W-50</b>	<ul style="list-style-type: none"><li>French Air Force approved (n°30330 STPA/MA)</li><li>SAE J 1899</li><li>FAA approved AD 80-04-03R2 paragraph b.1</li><li>AVCO LYCOMING (310F) and TELEDYNE CONTINENTAL (MHS-24) approved</li></ul>	Ashless dispersive multigrade oils for the lubrication of piston engines operating under severe and very severe conditions.
	<b>Aero DM 20W-60</b>	<ul style="list-style-type: none"><li>SAE J 1899</li><li>Meets the requirements of FAA AD 80-04-03R2 paragraph b.1 from FAA</li><li>Conform to 301F AVCO LYCOMING specification</li></ul>	Can be used throughout the year in any climate.  These oils already contain an anti-wear additive similar to TEXTRON Lycoming LW 16702.

TURBINE ENGINES LUBRICANTS

	PRODUCTS	SPECIFICATIONS*	APPLICATIONS
<b>Aeroturbine 331</b>		<ul style="list-style-type: none"><li>• FRANCE: AIR 3515/B Iss.3</li><li>• UK: DEF-STAN 91-99 Iss. 2</li><li>• Joint Service Designatioin: OM-11</li><li>• NATO code: O-135</li><li>• Turbomeca approved</li></ul>	Mineral oil for lubrication of aviation turbine engines.
		Bearings and gearboxes.	
<b>Turbonycoil 3516</b>		<ul style="list-style-type: none"><li>• FRANCE: AIR 3516/A Iss. 2</li><li>• US: MIL-PRF-6081 D Grade 1010</li><li>• NATO code: O-133</li></ul>	Mineral based turbine engine oil.
<b>Turbonycoil 600</b>		<ul style="list-style-type: none"><li>• FRANCE: DCSEA 299/A</li><li>• US: MIL-PRF-23699 F-STD</li><li>• UK: DEF STAN 91-101 Iss. 3</li><li>• Joint Service Designation: OX-27 / OX-28</li><li>• NATO code: O-156</li><li>• SAE-AS 5780-SPC</li></ul>	Synthetic lubrication oil for lubrication of gas turbine (type 5 cSt).
<b>Turbonycoil 699</b>		<ul style="list-style-type: none"><li>• UK: DEF STAN 91-100 Iss. 3 Amd.1</li><li>• Joint Service Designation: OX-26</li><li>• NATO code: O-160</li></ul>	Synthetic helicopter gearbox, transmission and turbine engine oil.

GEAR OILS

	PRODUCTS	SPECIFICATIONS*	APPLICATIONS
<b>Aerogear 823</b>		<ul style="list-style-type: none"><li>FRANCE: DCSEA 255/A</li><li>US: MIL-PRF-6086E (medium grade)</li><li>UK: DEF STAN 91-112/1</li><li>Joint Service Designation: OEP-70</li><li>NATO code: O-155</li><li>EUROCOPTER approved</li></ul>	Mineral oil for highly stressed gearboxes such as helicopter gearboxes.
<b>Aerogear 1032</b>		<ul style="list-style-type: none"><li>AIR 3525/B approved</li><li>US: MIL-PRF-6086E (medium grade)</li><li>UK: DTD 581 C grade OEP-70</li><li>Joint Service Designation: OEP-70</li><li>NATO code: O-155</li><li>EUROCOPTER ECS 2199 approved</li></ul>	Mineral oil for highly stressed gearboxes such as the latest generation of Eurocopter helicopter gearboxes.

TotalEnergies Lubrifants reserves the right to modify the formulation of its products without prior notice in order to improve their performance or comply with changing regulations.

TotalEnergies Lubrifants is non exclusive distributor of NYCO Aviation lubricants and greases: Turbonycoil, Nycoprotec, Hydraunycoil et Nyco grease.  
*\* performs to*

ENGINES PROTECTION LUBRICANT

	PRODUCTS	SPECIFICATIONS*	APPLICATIONS
<b>Aeroprotective 219</b>		<ul style="list-style-type: none"><li>FRANCE: AIR 1503/B type A</li><li>UK: DEF STAN 91-40/2</li><li>Joint Service Designation: PX-27</li><li>NATO code: C-615</li></ul>	Internal protective mineral oil for piston engines.

HYDRAULIC FLUIDS

	PRODUCTS	SPECIFICATIONS*	APPLICATIONS
<b>Aerohydraulic 520</b>		<ul style="list-style-type: none"><li>FRANCE: DCSEA 415/A (H-520)</li><li>US: MIL-PRF-5606H</li><li>UK: DEF STAN 91-48/1, standard grade</li><li>Joint Service Designation: OM-18</li><li>NATO Code: H-520</li></ul>	Mineral hydraulic oil for systems operating under: <ul style="list-style-type: none"><li>high pressure,</li><li>low and extermely low temperatures.</li></ul>
<b>Hydraunycoil FH 51</b>		<ul style="list-style-type: none"><li>FRANCE: DCSEA 415/A (H-515)</li><li>US: MIL-PRF-5606H Amd.3</li><li>UK: DEF STAN 91-48 Iss. 2</li><li>Joint Service Designation: OM-15</li><li>NATO Code: H-515</li><li>Airbus CML ref. 02BBB9</li></ul>	Microfiltered mineral hydraulic fluid operating under: <ul style="list-style-type: none"><li>high pressure,</li><li>low and extremely low temperatures.</li></ul>
<b>Hydraunycoil FH 42</b>		<ul style="list-style-type: none"><li>US: MIL-PRF-87257B</li><li>NATO Code: H-538</li><li>OX-538</li><li>Airbus CML ref. 02EBA1</li></ul>	Synthetic fire resistant low temperature hydraulic fluid.
<b>Hydraunycoil FH 2</b>		<ul style="list-style-type: none"><li>FRANCE: DCSEA 437/B</li><li>US: MIL-PRF-83282 D Amd. 1</li><li>Joint Service Designation: OX-19</li><li>NATO Code: H-537</li></ul>	Synthetic microfiltered fire resistant hydraulic fluid.

GREASES

	PRODUCTS	SPECIFICATIONS*	APPLICATIONS
<b>Ceran XM 220</b>		<ul style="list-style-type: none"><li>ISO6743-9: L-XCFIB1/2</li><li>DIN 51 502: KP1/2R-30</li><li>DCSEA 360 A specification related to sea water resistant grease codified NATO G-460</li></ul>	General purpose complex calcium sulphonate grease for high shocks loads, extreme pressures, high speeds, wide temperatures as well as excellent water wash out capabilities.
<b>Nycogrease GN 22</b>		<ul style="list-style-type: none"><li>FRANCE: DCSEA 395/B</li><li>US: MIL-PRF-81322G</li><li>UK: DEF STAN 91-52 Iss. 1 Amd. 2</li><li>Joint Service Designation: XG-293</li><li>NATO Code: G-395</li></ul>	General purpose wide temperature range synthetic based grease.

# The benefits offered by **TotalEnergies Lubrifiants**



**LubAnac** expert is our in depth, personalized diagnosis system for aircraft piston engines.

From a sample of oil, you can closely **monitor the natural wear** of your engine and identify the origin of abnormal wear, in order to define actions of preventive maintenance. The diagnosis report is available within 48 hours after the receipt of the oil sample in the lab.

You benefit from a personalized and safe access to your oil analyses results on the Internet. Through its extensive expertise, TotalEnergies has built up a large database with reference data of current aircraft piston engines.

**You can have confidence in the diagnosis and comments** established by our LubAnac technicians.



More information :

<https://lubricants.totalenergies.com/business/oil-diagnosis-lubanac>



## Aviation fuels

TotalEnergies aviation is **a major player in aviation fueling (SAF - Sustainable Aviation Fuel, JET A-1, AVGAS 100LL, AVGAS UL 91)**. TotalEnergies Aviation is also involved in the design and operation of airport facilities, and offers technical assistance agreements. TotalEnergies aviation supplies its customers, including **over 250 airlines, at nearly 800 airports and airfields worldwide**. Our diverse customer benefit from a personalized service offering tailored to their needs.

TotalEnergies aviation fuels are manufactured in compliance with the strictest quality controls and international standards. As a founding member of the JIG (Joint Inspection Group), TotalEnergies participates in the development and evolution of industry standards. With over 60 years' experience, TotalEnergies aviation is your local partner.



<https://aviation.totalenergies.com>



### A major player

With our production, supply chain and commercial presence in more than 160 countries, we deliver a full range of lubricants.

### Support and partnership

Thanks to local technical presence, we provide a high level of service to optimize your Total Cost of Ownership.

### References & OEMs

TotalEnergies Lubrifiants cooperates with equipment manufacturers to create high-technology products for optimal performance and production of your machinery.

# 5

## good reasons for choosing TotalEnergies Lubrifiants

### Innovation & Research

TotalEnergies Lubrifiants invests in biotechnologies to find the most suitable components to reach energy efficiency through formulations designed in our Research Centers.

### Quality and environment

TotalEnergies Lubrifiants ISO 9001 and 14001 certifications are the guarantee of a long term commitment to quality and environment. From the initial design stage, our R&D teams seek to develop products that minimize toxicity risks and environmental impact.



# TotalEnergies



[lubricants.totalenergies.com](https://lubricants.totalenergies.com)



✉ [ms.industry@@totalenergies.com](mailto:ms.industry@@totalenergies.com)

Safety Data Sheets are available at [ms-sds.totalenergies.com](https://ms-sds.totalenergies.com)



TotalEnergies Industry Solutions