

Industry Overview

MOVING YOUR WORLD



SPACE CUSTOMERS

Aerospace Corporation	ITT Aerospace
Allied Signal	JAXA
Astronautics Corporation of America	Jet Propulsion Labs
BF Goodrich Aerospace	Lockheed Martin Space Systems
Ball Aerospace	Mitsubishi Precision
Barden Precision Bearings	Moog Inc.
Blue Canyon Technologies	NASA
Boeing Satellite Systems	Northrop Grumman
Eaton Aerospace	Orbital Sciences Corporation
Honeybee	Parker Aerospace
Honeywell, Inc.	Starsys Research
Ithaco Space Systems	Tecstar Electro Systems
	Timken Aerospace & Super Precision
	UTC Aerospace

AVIATION CUSTOMERS

Airbus	Reinfurt GmbH & Co.
Air Canada	Hughes Aircraft
Air France	INA USA
Air India	Corporation
American Airlines	Kaydon Corporation
AMETEK Rotron	L-3 Brashear LP
Bangkok Airways	Lufthansa
BF Goodrich Aerospace	NTN Bearing
BAE Systems	Phillippines Airlines
Boeing Company	Pratt & Whitney
Bombardier	Rolls-Royce
Cessna	Sikorski
Delta Airlines	Singapore Airlines
Embraer	Tai Airways
GE Aviation	Turkish Airlines
General Atomics	United Airlines
Goodrich Aviation	UTC Aviation
GRW-Gebrueder	

DEFENSE CUSTOMERS

Airborne Express	Raytheon
AMETEK	USAF Joint Base
DFAS	Elmendorf-
Fort Campbell	Richardson
Army Base	US Department of Defense
General Dynamics	Wright Patterson
Hillman Air	Air Force Base
Force Base	
Naval Research Labs	
Naval Surface Warfare Center	

AEROSPACE

Nye Lubricants, a member of the FUCHS Group, has been designing high-quality synthetic lubricants for leaders in the aerospace industry for more than 60 years. Our scientists and engineers focus on two challenging categories of aerospace applications: discrete components that are lubricated for life and mechanical or electromechanical devices that must operate for extended periods in severe environments. Our synthetic oils and greases are specified for extreme-temperature jet engine actuators; cargo aircraft landing gear; aircraft controls; precision bearings in navigational instruments and space suits; wide temperature avionics connectors; linear actuators for satellite antennas; and many other critical aerospace components. Today, we continue to work with design engineers in the private, government, and military sectors to formulate new synthetic lubricants that will take off with next-generation aircraft and spacecraft.

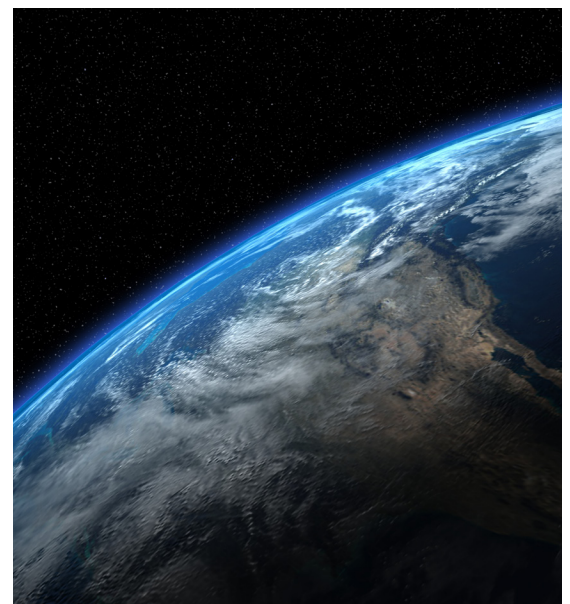
CUSTOM FORMULATION

Our approach to lubricant design is a cornerstone of our success. While some lubricant suppliers specialize in only one type of chemistry, we stock a complete selection of synthetic fluids. We work with all standard synthetic hydrocarbons, polyglycols, esters, silicones, polyphenylethers, as well as proprietary fluids such as multiplyalkylated cyclopentanes (MACs) and chlorophenylpolydimethylsiloxanes. We offer all five types of perfluoropolyether (PFPE) fluids, each with its own unique tribological qualities. This unparalleled range of

chemistries, which when coupled with our experience in selecting and blending fluids for specific applications, ensures that each customer gets the lubricant best suited to the application.

LUBRICATION SERVICES

We offer several technical services that are frequently used by aerospace customers. We maintain an Ultrafiltration Lab where any of our oils and greases can be filtered to precise cleanliness levels. We regularly filter and certify the cleanliness of other manufacturers' lubricants as well. We can certify oils to MIL-STD-1246 and greases to MIL-G-81937. In addition, we will package or repackage any lubricant in oilers, syringes, cartridges, and other small dispenser-containers. We can also customize Mil-Spec lubricants with rust inhibitors, antioxidants, fortifiers, and other additives to enhance performance or extend service life.





	Temp. Range	Qualifies to	Chemistry*	Precision Bearings	Other Bearings	Gears/Actuators	Vacuum	Ball/lead Screws
SPACE								
NYE SYNTHETIC OIL 2001A	-45 to 125 °C	NASA Part # 166683	MAC	•			•	
RHEOLUBE 2000	-45 to 125 °C	Lockheed 34-4962	MAC oil / organic thickener	•	•		•	
RHEOLUBE 2004	-45 to 125 °C	Lockheed 34-4962	MAC oil / organic thickener		•	•	•	
NYETORR 6200MZ	-45 to 150 °C		MAC /PTFE / EP			•	•	
NYETORR 6300	-65 to 250 °C		PFPE / PTFE	•	•		•	•
NYETORR 6350EL	-80 to 250 °C		PFPE / PTFE	•	•	•	•	•
NYETORR 6351	-65 to 250 °C		PFPE	•	•		•	
AVIATION								
RHEOLUBE 733MZ	-54 to 125 °C		Clay / POA		•	•		
RHEOLUBE 377AL	-40 to 125 °C		PAO / Lithium			•		
UNIFLOR 8512S	-50 to 225 °C		PFPE / PTFE	•	•		•	•
UNIFLOR 8172MT	-54 to 255 °C	MIL-PRF-27617F - Type III	PFPE / PTFE			•		
UNIFLOR 8961MT	-80 to 200 °C	MIL-PRF-27617F - Type IV	PFPE / PTFE			•		
DEFENSE								
NPE UC4	-40 to 150 °C	Hughes 20-2164	Ester	•	•	•		
NYE SYNTHETIC OIL 132	-60 to 120 °C	MIL-DTL-53131A	PAO / anti-wear additives	•	•			
NYE SYNTHETIC OIL 182	-40 to 125 °C	MIL-DTL-53131A	PAO / anti-wear additives	•	•			
NYE SYNTHETIC OIL 186	-34 to 125 °C	MIL-DTL-53131A	PAO / anti-wear additives	•	•			
NYE SYNTHETIC OIL 179A	-54 to 120 °C	MIL-DTL-53131A	PAO / anti-wear additives	•	•			
RHEOLUBE 951	-54 to 150 °C	Hughes 20-2164	Ester oil / lithium soap	•	•			
UNIFLOR 8172MT	-54 to 255 °C	MIL-PRF-27617F - Type III	PFPE / PTFE			•		
UNIFLOR 8961MT	-80 to 200 °C	MIL-PRF-27617F - Type IV	PFPE / PTFE			•		
UNIFLOR 8991MT	-60 to 250 °C	Honeywell ES-2155	PFPE / PTFE		•	•		

*The typical properties shown on this document should not be used as a basis for preparing specifications. For Technical Data and MSDS, contact Nye Lubricants, a member of the FUCHS Group.

Please note that U.S. Department of Commerce Export Administration Regulations and U.S. Department of State International Traffic in Arms Regulations (ITAR; 22 CFR 120-130) restrict the export of certain Nye products. An export license may be required.