



# Lubeneotes:

Design Engineer's Guide to Selecting a Lubricant

## Synthetic Food-Grade Lubricants



While many mineral-oil-based products meet the NSF International's food-grade requirements, they often do not measure up to the more demanding temperature and load requirements of modern food, beverage, and pharmaceutical processing equipment. Compared to mineral-oil lubricants, synthetics tolerate both lower and higher temperatures, offer improved antiwear properties, extend lubrication intervals, and lengthen the service life of moving parts. Like mineral oils, synthetic food-grade lubricants are nontoxic, odorless, colorless, and tasteless.

Nye's synthetic food-grade lubricants have been approved and registered by the National Sanitation Foundation (NSF) for use in and around food processing areas. They meet the Nonfood Compound H-1 guidelines for incidental food contact. All raw materials in these lubricants conform to Food and Drug Administration (FDA) CFR Title 21.

NSF has taken over the registration program formerly administered by the United States Department of Agriculture (USDA), which was discontinued in 1998. The NSF program provides a proven process for determining product acceptability and compliments NSF food processing equipment certification and food safety evaluations.

In addition to products listed on the back of this sheet, Nye can work directly with you to formulate new synthetic lubricants for your food processing and handling equipment, ensuring the new formulations use FDA recognized raw materials. We can also register new formulations with NSF.

Nye has Halal certification from the Islamic Food and Nutrition Council of America (IFANCA). This certification assures our customers that the certified food grade lubricants and production facility are in compliance with the Halal requirements under Islamic laws.

All Nye's oils and greases can be packaged in a variety of containers: bottles, jars, pails, drums, syringes and cartridges. Private labeling is also available.

For technical data, evaluation samples, questions about any synthetic food-grade lubricant product, or to discuss a synthetic food-grade lubricant custom-designed for your application – call us at +1.508.996.6721 or visit our website at [nyelubricants.com](http://nyelubricants.com).

**On the back of this page is a partial list of the most commonly used Nye synthetic lubricants for food-grade applications.**



Contact Nye at +1.508.996.6721  
or [contact@nyelubricants.com](mailto:contact@nyelubricants.com)

TECHNOLOGY IN MOTION™

Multi-Purpose Oils	Certifications	Chemistry	Temp Range (°C)	Description
<a href="#">NyOil®</a>	H1	Clear Mineral Oil	-20 to 100	Light viscosity, white mineral oil
<a href="#">Synthetic Oil 269</a>	H1 & Halal	Synthetic Hydrocarbon	-54 to 120	ISO Grade 32 - worn gears, gear boxes
<a href="#">Synthetic Oil 250</a>	H1 & Halal	Ester	-20 to 280	ISO Grade 220 - High temperature chain oil
<a href="#">UniFlor™ 8920</a>	H1	PFPE	-65 to 250	ISO Grade 150 - chemically inert

Multi-Purpose Greases	Certifications	Chemistry	Temp Range (°C)	Description
<a href="#">Rheotemp™ 662</a>	H1 & Halal	Synthetic Hydrocarbon & Calcium Sulfonate	-55 to 175	Light viscosity grease, superior water resistance, corrosion resistant, excellent extreme pressure and antiwear properties
<a href="#">Rheotemp™ 669</a>	H1 & Halal	Synthetic Hydrocarbon & Calcium Sulfonate	-30 to 175	Heavy viscosity grease, superior water resistance, corrosion resistant, excellent extreme pressure and antiwear properties
<a href="#">NyoGel® 670</a>	H1	Synthetic Hydrocarbon & Silica	-35 to 120	Medium viscosity grease for mechanical devices
<a href="#">Fluorocarbon Gel 807</a>	H1 & Halal	Synthetic Hydrocarbon & PTFE	-40 to 125	Medium viscosity grease, good water resistance
<a href="#">Fluorocarbon Gel 880FG</a>	H1 & Halal	Silicone & PTFE	-40 to 200	High viscosity damping grease, good wear performance, potable water certified
<a href="#">UniFlor™ 4622R-FG</a>	H1 & Halal	PFPE & PTFE	-20 to 260	High viscosity grease with excellent high temperature performance, chemically inert, contains corrosion inhibitor
<a href="#">UniFlor™ 8512S-FG</a>	H1	PFPE & PTFE	-50 to 225	Softer version of 8512-FG, for lower torque requirements, chemically inert
<a href="#">UniFlor™ 8921A</a>	H1	PFPE & PTFE	-65 to 250	Medium viscosity, low torque, wide temperature capability, chemically inert