Nye® Lubenotes:

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.

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 (508) 996-6721 or visit our web site at www.nyelubricants.com.

Contact Nye at 1.508.996.6721
or techhelp@nyelubricants.com

Lubenotes: Synthetic Food-Grade Lubricants

Multi-Purpose Oils	NSF Registration Number	Chemistry	Temperature Range (°C)	Description NSF-H1
DHL 400	133067	Synthetic Hydrocarbon	-40 to 150	Light viscosity oil designed for dental handpieces.
DHL 600	133066	Synthetic Hydrocarbon	-40 to 150	Slightly heavier viscosity than DHL 400, also designed for dental handpieces.
NyOil®	128786	Clear Mineral Oil	-20 to 100	Light viscosity, white mineral oil.
Synthetic Oil 269	128789	Synthetic Hydrocarbon	-54 to 120	ISO Grade 32
Synthetic Oil 271	128788	Synthetic Hydrocarbon	-50 to 120	ISO Grade 68
Synthetic Oil 272	128787	Synthetic Hydrocarbon	-35 to 120	ISO Grade 150
Synthetic Oil 276L	141058	Synthetic Hydrocarbon	-20 to 120	Minimum change in damping with temperature.
UniFlor™ 8320	133070	PFPE	-20 to 250	ISO Grade 680 – chemically inert
UniFlor™ 8620	133071	PFPE	-20 to 250	ISO Grade 460 – chemically inert

Multi-purpose Greases	NSF Registration Number	Chemistry	Temperature Range (°C)	Description NSF-H1
Fluorocarbon Gel 807	114275	Synthetic Hydrocarbon and PTFE	-40 to 125	Medium viscosity grease. Good water resistance.
Fluorocarbon Gel 835C-FG	136804	Silicone and PTFE	0 to 200	Very high viscosity, damping grease.
Fluorocarbon Gel 874	140520	Synthetic Hydrocarbon and PTFE	0 to 125	Heavy viscosity for mechanical damping.
Fluorocarbon Gel 880FG	133065	Silicone and PTFE	-40 to 200	High viscosity, damping grease. Good wear performance.
Fluorocarbon Gel 885FG	133064	Silicone and PTFE	-40 to 200	Medium viscosity grease. Low friction.
NyoGel® 670	128785	Synthetic Hydrocarbon and Silica	-35 to 120	Medium viscosity grease for mechanical devices.
NyoGel® 670F	133068	Synthetic Hydrocarbon and Silica	-35 to 120	Medium viscosity grease for mechanical devices. PTFE added for better low temperature performance.
PG-44A-FG	140846	Polybutene and Silica	20 to 120	Extreme heavy viscosity for mechanical damping.
UniFlor™ 8512FG	136803	PFPE and PTFE	-50 to 225	Wide temperature medium viscosity grease. Chemically inert.
UniFlor™ 8512S-FG	136802	PFPE and PTFE	-50 to 225	Softer version of UniFlor™8512FG. For lower torque requirements.
UniFlor™ 8622	136042	PFPE and PTFE	-15 to 250	High viscosity grease with excellent high temperature performance. Chemically inert.

Nye Lubricants, Inc. 12 Howland Road Fairhaven, MA 02719 USA Ph: 1.508.996.6721 Fx: 1.508.997.5285 www.nyelubricants.com