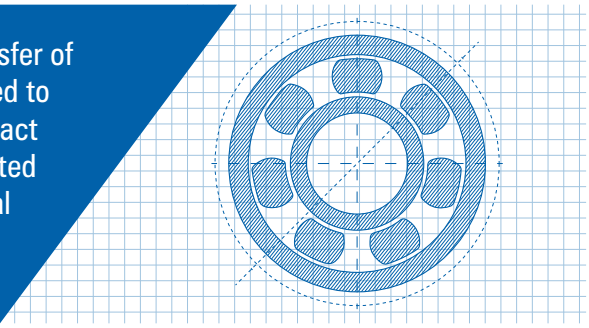
PFOA-REACH Compliant Grease for Semicon & In-Vacuum

Uniflor™ 8771

Excellent low outgassing lubricant in compliance with current PFOA restrictions

Semicon manufacturing facilities utilize robots for the handling and transfer of wafers, flat panel displays and other materials. Robots are often exposed to high vacuum, high temperature conditions, and are occasionally in contact with aggressive chemicals. These extreme conditions require a fluorinated lubricant to ensure the stable performance of the robots' precision metal bearings. Uniflor™ 8771 offers excellent lubrication to replace MRO lubricants which may not comply with REACH regulations.

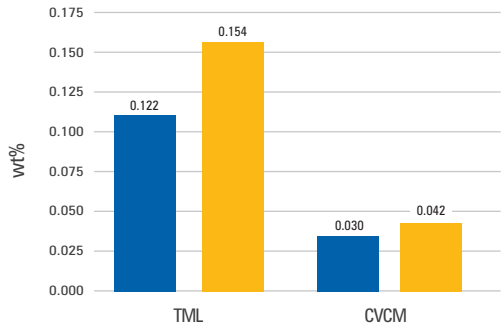


ADVANTAGES OF UNIFLOR™ 8771

- Complies with PFOA standard
- Reduces friction & wear
- Extends bearing life
- Offers low outgassing, particle generation, & vapor pressure

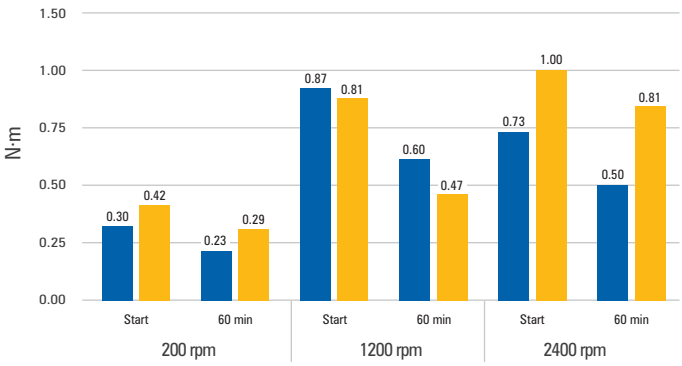
VACUUM STABILITY

Determines the volatile content of materials when exposed to 125°C and less than 5E^{-05} torr vacuum environment, where total mass loss (TML) and collected volatile condensable materials (CVCM) are measured. (ASTM E-595)



DYNAMIC PARTICLE GENERATION

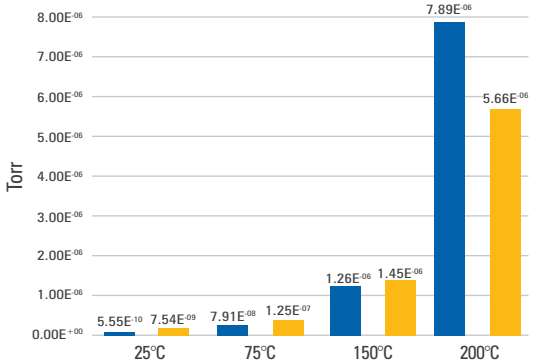
Two milliliters of grease is applied to a Dynamic Particle Generator's ball screw assembly. The ball screw is operated at preset speeds. DC motor amperage is monitored at each speed from which a calculated average torque value is reported. (NYE-CTM)



GRAPH KEY: Uniflor™ 8771 | MRO Grease

VAPOR PRESSURE

A Knudsen test cell of known weight and geometry contains the sample. The cell is weighed and placed in a vacuum oven at set temperature and duration. Mass loss, temperature, duration and molecular weight are used to calculate vapor pressure in torr using the Knudsen Vapor Pressure Equation. (NYE-CTM-59)



TYPICAL PROPERTIES

Base Oil Properties	Conditions	Uniflor™ 8771	MRO Grease	Test Method
Chemistry		PFPE / PTFE	PFPE / PTFE	
Temperature Range		-50 to 250°C	-50 to 250°C	
Kinematic Viscosity	40°C	192 cSt	200 cSt	ASTM D-445
Grease Properties				
NLGI Grade		2	2	
Oil Separation	24 hrs, 100°C	5.80 wt%	< 2 wt%	ASTM D-6184
Evaporation	24 hrs, 100°C	**0.00 wt%**	< 0.1 wt%	ASTM D-972
Vacuum Stability (TML)	125°C, < 5 x 10^{-5} torr, 24 hrs	**0.122**	0.154	ASTM E-595
Vacuum Stability (CVCM)		**0.030**	0.042	
PFOA Content		**< 25 ppb**	> 25 ppb	HPLC-MS

PACKAGING OPTIONS

Greases are available in a variety of packaging sizes for both high- volume automated production dispensing and small volume manual dispensing, such as field repair activities.

- 1 kg jars
- 55 cc syringes
- 50 gram jars

Please contact us at info@tecnolubeseal.it for more information.

Since 1844: Our performance is reflected in the value we bring to our customers.

Nye Lubricants is a leader in the innovation, formulation and provision of synthetic lubricants, enabling and improving breakthrough products and critical new technologies. We bring proven experience, deep technical knowledge and customer focus to solve our customers' toughest challenges, adding tangible value to products in a wide range of industries and applications.

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