



NYE NYETORR[®] 5300

Ultrafiltered

A PTFE thickened, heavy viscosity, perfluoropolyether based grease intended for high vacuum and clean room applications, spacecraft and semiconductor manufacturing equipment. Benefits include very low vapor pressure.

The SmartGrease[™] Company

Lubricant Properties			Typical Value	Test Method
Recommended Service Range (°C)			-65 to 250	
Thickener			PTFE	
Base Oil (NyeTorr 5301)	Type		PFPE	
	Kinematic Viscosity cSt (mm ² /s)	100°C	45	ASTM D-445
		40°C	140	
		-40°C	2,300	
	Viscosity Index		345	ASTM D-2270
	Flash Point (°C)		None	ASTM D-92
Pour Point (°C)		- 75	ASTM D-97	
Typical Properties of the Grease				
Color, Appearance			White, Smooth	
Penetration 1/10 mm	Unworked		-	ASTM D-217
	Worked	60 X	235 - 310	
		10,000 X	-	
		100,000 X	-	
NLGI Grade		1 - 3		
Density	gm/cc	25°C	1.9	ASTM D-1480
Dropping Point (°C)			-	ASTM D-2265
Oil Separation	24 hours	100°C	4.2 %	FTM 791B, 321.2
Evaporation	24 hours	100°C	< 0.1 %	ASTM D-972
Microscopic Particulate Contamination			< 300 particles/cc, <35µm	FTM 791B, 3005.3
Outgassing Mass Flow Rate (25°C)		g/sec/cm ²	3 X 10 ⁻⁹	Nye CTM
Vapor Pressure	torr	25°C	5 X 10 ⁻⁹	
		75°C	1 X 10 ⁻⁸	
		150°C	2 X 10 ⁻⁸	
4 Ball Wear	60 min., 1200 RPM 75°C	20 kg	1.06 mm	ASTM D-2266
		40 kg	1.52 mm	
Low Temperature Torque (-40°C) gm-cm	Starting Torque		1,508	ASTM D-1478
	Running Torque	10 minutes	-	
	Running Torque	60 minutes	676	
Oxidative Stability	100 hours	100°C	-	ASTM D-942
Bearing Rust Test			-	ASTM D-1743
Apparent Viscosity			-	

The typical properties shown on this product data sheet should not be used as a basis for preparing specifications. Refer to our product Material Safety Data Sheet for detailed safety information. (0506)