



Rodutherm GPL PAO-FG

Food Grade Gas Compressor Lubricant · 206 Series | Technical
Data Sheet

Introduction

Rodutherm GPL PAO-FG is a food grade polyalphaolefin (PAO) gas compressor lubricant formulated for applications where incidental food contact is possible. Its high viscosity index and very low pour point ensure reliable performance from cryogenic to elevated operating temperatures. Registered as NSF H1 and suited for CO₂ compression, biogas upgrading, cryogenic gas processing, and industrial gas applications in food, beverage, and pharmaceutical facilities.

Applications, Gases & Benefits

Applications	Gases	Benefits
▶ CO₂ process gas compression (food grade) ▶ Biogas and biomethane compression ▶ Cryogenic and industrial gas compression ▶ Hydrocarbon gas compression (food contact environments)	▶ CO₂ (R-744) ▶ Light hydrocarbon gases ▶ Biogas and biomethane ▶ Inert and process gases	▶ Food grade formulation (NSF H1 registered) ▶ Excellent thermal and oxidation stability ▶ Very low pour point (down to -63 °C) ▶ Extremely low volatility and minimal carryover ▶ Strong corrosion protection ▶ Extended service life under continuous duty

Technical Specifications

Property		VG 32	VG 46	VG 68	VG 100	VG 150	VG 220
Viscosity @ 40 °C	cSt	32	46	68	100	144	220
Viscosity @ 100 °C	cSt	6.0	7.7	10.4	14.0	18.8	25.8
Viscosity Index		135	136	140	142	148	155
Density @ 15 °C	g/cm ³	0.83	0.84	0.84	0.84	0.85	0.85
Pour Point	°C	-63	-58	-54	-46	-44	-36
Flash Point	°C	245	262	260	260	261	261
Copper Strip (D130)		1a	1a	1a	1a	1a	1a
Rust Test (D665)		Pass	Pass	Pass	Pass	Pass	Pass

NOTE Values in this Technical Data Sheet are typical and do not constitute a specification. Manufacturing specifications are available on request. Routine oil analysis is recommended. Specifications are subject to change due to formulation or raw-material updates; always verify that this TDS is the most current version.

Rodutherm GPL PAO-FG — Technical Data Sheet The data presented is typical and subject to normal manufacturing variation. For product safety information, please refer to the Safety Data Sheet.