

Introduction

Rodutherm GPL PAG is a polyalkylene glycol (PAG) based lubricant for hydrocarbon gas compression, hydrocarbon refrigeration, and heat pump applications. Its low dilution rate in hydrocarbon service preserves operating viscosity where mineral or PAO-based lubricants lose film strength. Equally suited for petrochemical process gas compression, LNG boil-off gas handling, field gas gathering, and propane/butane refrigeration systems.

Applications, Gases & Benefits

Applications	Gases	Benefits
▶ Hydrocarbon gas compression (light to medium) ▶ Petrochemical process gas compression ▶ LNG boil-off and vapor compression ▶ Natural gas field and infrastructure compression ▶ Hydrocarbon refrigeration (R-290, R-600, R-600a) ▶ Industrial heat pumps	▶ Light to medium hydrocarbon gases ▶ Hydrocarbon refrigerants: R-290, R-600, R-600a ▶ Ethylene, propylene, and petrochemical streams ▶ LNG boil-off gas and flash gas	▶ Exceptional resistance to viscosity dilution by hydrocarbon gases ▶ Reliable miscibility with hydrocarbon refrigerants for oil return ▶ Very low volatility and minimal lubricant carryover ▶ Excellent thermal and oxidation stability ▶ Very high viscosity index (178–238) ▶ Superior carbon and varnish control

Technical Specifications

Property		VG 32	VG 46	VG 68	VG 100	VG 150	VG 220	VG 320
Viscosity @ 40 °C	cSt	34	46	68	100	150	220	320
Viscosity @ 100 °C	cSt	7.1	9.2	12.9	17.8	25	36	50
Viscosity Index		178	185	190	196	201	213	220
Density @ 15 °C	g/cm ³	0.99	0.98	0.98	0.99	1.00	1.00	1.00
Pour Point	°C	-57	-51	-48	-42	-39	-33	-30
Flash Point	°C	208	210	211	215	217	223	230
Copper Strip (D130)		1b	1b	1b	1b	1b	1b	1b
Rust Test (D665)		Pass	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 PAG — 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.