

Introduction

Rodutherm GPL PAO is a polyalphaolefin (PAO) based gas compressor lubricant with an advanced additive package, designed for the widest range of process and hydrocarbon gas compression duties. Its combination of exceptional thermal stability, very low pour point (down to -63°C), and superior water separation makes it the preferred synthetic lubricant for sour gas, biogas, CO_2 , cryogenic, LNG, petrochemical, and industrial gas compression where carbon and varnish control are critical.

Applications, Gases & Benefits

Applications	Gases	Benefits
- Hydrocarbon and sour gas compression - Biogas and biomethane compression CO_2 process gas and carbon capture - Cryogenic and LNG infrastructure compression - Industrial and specialty gas compression - Ammonia and urea production compression	- Light to medium hydrocarbon gases - Sour gas and acid gas streams (H_2S) - Biogas, biomethane, and landfill gas CO_2, nitrogen, and inert process gases - LNG boil-off gas and cryogenic gases	- Excellent thermal and oxidation stability - Superior carbon and varnish resistance - Corrosion protection in sour gas service (H_2S) - Very low pour point (down to -63°C) for cryogenic duty - Extremely low volatility and minimal carryover - High water separation — outperforms PAG in wet gas streams - Extended service life under continuous duty

Technical Specifications

Property		VG 15	VG 32	VG 46	VG 68	VG 100	VG 150	VG 220
Viscosity @ 40°C	cSt	15	32	46	68	100	150	220
Viscosity @ 100°C	cSt	3.65	5.9	7.6	10.4	14.2	20.1	27.3
Viscosity Index		120	129	130	138	145	155	159
Density @ 15°C	g/cm^3	0.83	0.84	0.85	0.85	0.85	0.85	0.85
Pour Point	$^{\circ}\text{C}$	-63	-61	-57	-54	-52	-53	-49
Flash Point	$^{\circ}\text{C}$	213	243	259	259	260	252	260
Copper Strip (D130)		1a	1a	1a	1a	1a	1a	1a
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.