

PRODUCT DATA SHEET

Royal Geoguard 300 Low-Ash **Low Ash Natural Gas Engine Oil**



PRODUCT DESCRIPTION:

Royal Geoguard 300 Low-Ash are a combination of high quality base oils and a unique combination of additives specially designed for service in two and four cycle LPG and natural gas engines. The low ash product is designed to provide both maximum stability and outstanding performance. Typically, stationary natural gas and LPG engines operate a low to medium speeds for prolonged periods placing an increased amount of stress on the lubricant. As a result the oil must be able to prevent the formation of deposits, minimize sludge, reduce varnish and keep the engine clean. The oil combines a highly effective detergent/dispersant with oxidation and corrosion inhibitors, anti wear agents as well as anti-foaming additives.

Royal Geoguard 300 Low-Ash combine an ashless dispersant/detergent package with oxidation and corrosion inhibitors, anti-foam agents as well as anti-wear additives making them suitable for use in the engines of major equipment manufacturers. This ashless formulation is recommended for use in ashless chemistry where the prevention of intake and exhaust deposits is critical. The reduced carbon and ash deposits make the **Royal Geoguard 300 Low-Ash** the best choice for a universal ashless gas engine oil in a wide variety of low and high speed engines.

KEY FEATURES:

- Ashless nature minimizes spark plug deposits
- Excellent protection against wear
- Reduced oil consumption

CUSTOMER BENEFITS:

- Low ash formula provides excellent protection against wear, sludge, varnish
- Reduces ring sticking, spark plug fouling, detonation and/or pre-ignition
- Inhibits oxidation and nitration leading to longer oil service life and reduced maintenance
- Compatible with catalytic converters due to its low level of phosphorus
- 15W40 grade provides improved oil flow at low temperatures resulting in improved lubricating properties

APPLICATIONS:

Meets MIL-L-2104A, S-1 and API CB qualifications

Passes the quality level of MIL-L-2104B and
API CC
Caterpillar
Cooper Bessemer Four Cycle
Dresser Rand Class I, II, III
Enterprise
Fairbanks-Morse

Superior
Waukesha (except VGF series)
Worthington
Ajax
Hercules

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PACKAGING:

Totes, Drums, Pails, Gallons, Quarts

Typical Properties

Royal Geoguard 300 Low-Ash							
Product Number	147	148	149	150	151	152	Test Method
SAE Grade	20	30	40	50	10W30	15W40	
Viscosity @ 40C, cSt	48	103	124	167	66	104	
Viscosity @ 100C, cSt	7.0	11.7	13.4	18.0	10.7	13.8	ASTM D445
Viscosity @ 100F, SUS	246	540	650	870	335	533	
Viscosity @ 210F, SUS	49	65	73	93	64	73	
Viscosity Index	97	95	103	121	135	130	ASTM D2270
Pour Point, F	-20	0	5	10	-30	-25	ASTM D97
Flash Point, F	425	430	450	460	390	420	ASTM D92
API Gravity	28.5	27.5	27.0	26.5	29.3	28.5	
Nitrogen, % weight	0.006	0.006	0.006	0.006	0.006	0.006	
Phosphorus, % weight	0.02	0.02	0.02	0.02	0.02	0.02	
Calcium, % weight	0.075	0.075	0.075	0.075	0.075	0.075	
Zinc, % weight	0.022	0.022	0.022	0.022	0.022	0.022	
Sulfated Ash, % weight	0.32	0.32	0.32	0.32	0.32	0.32	
Base Number	4.5	4.5	4.5	4.5	4.5	4.5	
API Service	CD	CD	CD	CD	CD	CD	

Typical Properties are typical of those obtained with normal production tolerance and do not constitute essentially a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice.

Health and Safety:

When used for its intended application, this product is not expected to have any adverse health implications. For complete information on safe handling, as well as physical and chemical characteristics please refer to the Material Safety Data Sheet (MSDS) found on our website, www.royalmfg.com, or call 918-584-2671. Do not use this product for purposes other than its intended use. Please be responsible to the environment when disposing of used product.