



NATIONAL™ PREMIUM R&O OILS | Industrial Fluid

Product Description

NATIONAL PREMIUM R&O Oils are formulated to provide superior oxidation stability, rust & corrosion protection, minimum foam, fast air release, rapid water separation and excellent thermal stability.

NATIONAL PREMIUM R&O Oils are designed to give outstanding performance in steam and hydroelectric light duty turbines but can also be used as a general purpose machine oil for shop use when R&O type oil is needed or is recommended. The multifunctional characteristics of these oils may allow them to replace other special application lubricants, which can result in reduced inventory and operating cost. NATIONAL PREMIUM R&O 32 through 150 are recommended for use in most electric motor bearings, air compressors, gears, hydroelectric turbines, steam turbines, marine turbines, and non-heavy duty hydraulic systems where OEM recommends R&O type oils.

Industry and OEM Specifications

- DIN 51524-1, DIN 51515-1
- Siemens TLV 901304
- British Standard 489-1999
- Alstom HTGD 90117
- GEK 28143b, GEK 46506D
- FIVES (formally MAG) P-38, P-54 and P-55
- Parker Denison HF-0 Bench Test

Features

- Outstanding Rust and Oxidation protection
- Fast air release minimizes pump cavitation in systems with high circulation rates
- Excellent water separation (demulsibility) that facilitates water removal
- Environmentally friendly due to its ashless (zinc-free) formulation

The product described above is designed for a specific use and may not be valid for other uses not specified in our specification sheet or in applications not requiring this specific product. Pinnacle Oil believes the information presented in this specification is accurate at the time written and is based upon internally generated information and information as presented by its vendors. No representation, warranty, or guarantee is made as to its accuracy or completeness. We do not accept any liability for any loss or damage that may occur from the use of this information.



Technical Data

(typical values)

ISO GRADE	ASTM	22	32	46	68	100	150	220	320	460
Product Number		07-505022	07-005022	07-001528	07-001232	07-001233	07-001234	07-001235	07-001236	07-005460
SDS Number		S092	S107	S104	S120	S011	S011	S011	S011	S124
Viscosity @ 40°C, cSt	D445	20.5	28.9	45.3	63.22	108.2	144	223.8	349.9	505.6
Viscosity @ 100°C, cSt	D445	4.24	5.32	6.87	8.28	12.11	14.46	19.69	25.73	32.85
Viscosity Index	D2770	112	121	107	99	102	99	100	97	97
Specific Gravity 60°F	D4052	0.852	0.851	0.865	0.876	0.877	0.881	0.885	0.888	0.891
Pour Point, °C	D5950	-45	-36	-24	-21	-42	-24	-18	-15	-15
Color ASTM	D1500	L1.0	L1.0	L1.5	L1.5	L0.5	L2.0	L3.5	L3.5	L4.5
Demulsibility, min (time to 40/37/3)	D1401	20	10	25	20	20	15	30	30	10
Foam Seq. I	D892	20/0	0/0	40/0	0/0	0/0	10/0	0/0	0/0	0/0
Seq. II		30/0	0/0	10/0	0/0	0/0	10/0	0/0	0/0	0/0
Seq. III		30/0	20/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
RPVOT, min	D2272	700	700	650	500	660	500	310	300	300
Rust Test, 24 h	D665B	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

1. Always follow your operator's manual to confirm that the selected product is consistent with the original equipment manufacturer's recommendation and maintenance practices
2. Do not use these R&O oils in large and high temperature gas turbines or in high pressure systems in the vicinity of flames, sparks and hot surfaces

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