



# ROOTS® Synthetic Oil



ROOTS® Synthetic Oil is a long life, high film strength, energy efficient, synthetic lubricant that significantly increases bearing life and equipment reliability.

## Beyond Synthetic

ROOTS® Synthetic Oil gains its performance advantages over competing mineral and synthetic oils through its superior blend of synthetic base oils plus proprietary additive technology. This unique additive technology is proven to make equipment run smoother, cooler, quieter, longer and more efficiently.

ROOTS Synthetic Oil typically replaces conventional, low film strength. R&O (rust and oxidation inhibited) oils that rely solely on their viscosity to protect equipment against wear.

## Performance advantages

### High oxidation stability:

Contains oxidation-resistant additives that mean longer oil life and fewer oil changes. ROOTS Synthetic Oil excels in ASTM oxidation tests, and in the field, where it counts. Longer oil life means lower expenditures, and greater conservation.

### Rapidly separates from water:

ROOTS Synthetic Oil rapidly and completely separates from water, which is easily drained from the bottom of the oil reservoir.

### Saves energy:

Extremely low coefficient of friction that is proven to save energy over conventional oils. In rotating equipment these savings frequently exceed the total cost of the oil within several months, making what was once an oil expense a profit.

### Reduces bearing vibrations:

The tough oil film of ROOTS Synthetic Oil coupled with its ability to micro-polish contacting bearing elements provides superior bearing lubrication.

### Longer oil life:

Outstanding oxidation stability that greatly extends oil change intervals while keeping equipment clean.

### Excellent corrosion protection:

ROOTS Synthetic Oil's tough oil film forms an ionic bond on metal surfaces, which acts as a preservative oil during shutdown and provides instant lubrication at startup.

### Synthetic solvency:

ROOTS Synthetic Oil's natural solvency cleans up dirty equipment and keeps it clean.

### Compatible with seals:

ROOTS Synthetic Oil has excellent seal compatibility.

### Environmentally responsible:

ROOTS Synthetic Oil components are TSCA listed and meet EPA, RCRA and OSHA requirements. ROOTS Synthetic Oil extends oil drain intervals, eliminates premature oil changes, decreases the amount of oil purchased and disposed of and conserves energy.

### Blower protection:

Protects blower through a wide range of operating temperatures.

### Pour point:

From -40°F (-40°C).  
Flash Point - at 475°F (246°C).

### Range of use:

ROOTS Synthetic Oil can be used in any blower application or operating environment.

### High film strength:

ROOTS Synthetic Oil carries up to 700% greater loads than other mineral and synthetic oils

### Compatibility with other oils:

ROOTS Synthetic Oil is compatible with, and can be mixed with, other mineral oils and most other synthetic oils. No special cleaning is required at change out for blowers previously running on mineral oil. NOTE: It is not compatible with silicone or glycol synthetics.

### ISO grade availability:

Available in ISO Grade 100, 220, or 320.

### Container sizes:

Available in 12-quart cases, 6-gallon cases, 5 gallon pail, or 55 gallon drums.



INDUSTRIAL EQUIPMENT • MAJOR STOCKING DISTRIBUTOR  
ENGINEERING • SALES • SERVICE • PARTS

242 POPLAR STREET • P.O. BOX 8053 • TOLEDO, OH 43605 • (419) 691-3571 • FAX (419) 691-1928  
5091 WEST 164TH STREET • CLEVELAND, OHIO 44142 • (216) 265-0666 • FAX (216) 265-0667  
1-800-882-1992 (OHIO TOLL FREE) 1-855-691-0621 (MICHIGAN TOLL FREE)

www.tomlinequip.com



**For further information contact:**

**ROOTS**  
 900 W. Mount Street,  
 Connersville Indiana, 47331  
 USA

**Tel:** +1 765 827 9200  
**Web:** www.RootsBlower.com

**ROOTS® Synthetic Oil properties**

Typical Properties*	ISO Grade/AGMA Grade		
	100	220	320
AGMA Grade	3	5	6
Viscosity			
cSt @ 40°C	91.8	206.2	302.6
cSt @ 100°C	13.1	23.4	31.0
SSU @ 100°C	470	1086	1619
SSU @ 210°C	71.9	116	150
Viscosity Index	142	140	141
Specific Gravity @ 60°F	0.859	0.869	0.874
Flash °F	475	475	485
Pour Point °F	-60	-45	-40
D-130 Copper Corrosion			
3 hrs. @ 210°F	1A	1A	1A
250 hrs. @ 210°F	1A	1A	1A

\*All properties are typical and may vary.

**Note:**

ROOTS Synthetic Oil's solvency cleans wear metals and deposits left behind by previous oils. These wear metals and deposits can become soluble in the new oil, causing abnormally high values on used oil analysis until equipment is clean.

**Application recommendations**

2"-8" Blower Recommended Oil Grades	
Ambient Temperature	ISO Viscosity Range
Above 90°F (32°C)	320
32° to 90°F (0°-32°C)	220
Below 32°F (0°C)	100

10"-20" Splash Lubricated Blower Recommended Lubricating Oils	
Ambient Temperature	ISO Viscosity Range
Above 90°F (32°C)	320
32° to 90°F (0°-32°C)	220
Below 32°F (0°C)	100

10"-20" Pressure Lubricated Blower Recommended Lubricating Oils	
Ambient Temperature	ISO Viscosity Range
32° to 120°F (0°-49°C)	220
Below 32°F (0°C)	100
All RGS - Use ISO-VG-100	

See the manual provided with the blower for service intervals of the lubrications mentioned.



**INDUSTRIAL EQUIPMENT • MAJOR STOCKING DISTRIBUTOR**  
**ENGINEERING • SALES • SERVICE • PARTS**  
 242 POPLAR STREET • P.O. BOX 8053 • TOLEDO, OH 43605 • (419) 691-3571 • FAX (419) 691-1928  
 5091 WEST 164TH STREET • CLEVELAND, OHIO 44142 • (216) 265-0666 • FAX (216) 265-0667  
 1-800-882-1992 (OHIO TOLL FREE) 1-855-691-0621 (MICHIGAN TOLL FREE)  
 www.tomlinequip.com