# pdblowers Synthetic Oil

## For Positive Displacement Blowers & Vacuum Pumps

Our synthetic blower oil is specially formulated to provide superior lubrication for the gears and bearings in rotary lobe, tri-lobe and helical screw blowers. It can withstand the toughest operating conditions in any environment or blower application.

pdblowers synthetic oil is available in ISO Grade 100, 150, 220 and 320. Food grade oil is also available.

#### PERFORMANCE ADVANTAGES

**LONG OIL LIFE**: pdblowers synthetic blower oil has a service life expectancy 3-4 times greater than conventional petroleum-based oils that rely only on their viscosity to protect your blower.

**HIGH OXIDATION STABILITY**: Exhibits superior resistance to oxidation, shear and thermal degradation for longer oil life and fewer oil changes.

**ENHANCED BEARING PROTECTION**: By reducing friction and heat generation, our synthetic blower oil provides maximum protection for your blower bearings.

**EXCELLENT WATER SEPARATION**: Our synthetic blower lubricant exhibits a 40/40/0 in under 10 minutes in the ASTM D-1401 demulsibility test.

**CONTROLS RUST & CORROSION**: Additives control the formation of rust, corrosion, carbon & varnish.

**SUPERIOR TEMPERATURE RESISTANCE**: A high viscosity index, high flash and auto ignition points and low volatility protect your blower through a wide range of operating temperatures.



#### OUTPERFORMS NAME BRANDS

In third party testing our pdblowers synthetic oil has outperformed the equivalent synthetic oil from major OEM blower manufacturers.

We substitute our oil for the following name brands:

ROOTS® SYNTHETICSUMMIT SBLGARDNER DENVER AEON® PDCHEMLUBE® 630/632KAESER OMEGA SB

With equivalent lubricants, our synthetic oil is top-off compatible. No change-out or flush necessary.

Recommended Oil Grades					
AMBIENT TEMPERATURE	DISCHARGE TEMPERATURE	ISO VISCOSITY			
Above 90°F (32°C)*	Above 300°F (149°C)	320			
32° to 90°F (0°-32°C)	250° to 300°F (120°-149°C)	220			
0° to 32°F (-12°-0°C)	100° to 250°F (38°-120°C)	150			
Below 0°F (-12°C)*	32° to 100°F (0°-38°C)	100			

\*With extreme ambient temperatures, oil selection can be more complex. Contact us to discuss your application.

#### NON-TOXIC / NON-HAZARDOUS



#### MAINTENANCE INTERVALS

New blowers typically ship dry from the factory and require an initial oil fill prior to startup. Oil should then be changed after the initial 100 hours of operation.

Normal life expectancy of synthetic oil is approximately 6000 hours with an oil temperature of 180°F (82°C). As the oil temperature increases by increments of 15°F (8°C), the life is reduced by half. For example, an oil temperature of 195°F (90.5°C) will produce a life expectancy reduced by half or 3000 hours oil service life.

The oil temperature may be estimated by multiplying the discharge temperature of the air or gas stream by 0.8. As an example, if the discharge air temperature of the blower is 200°F, it is estimated that the oil temperature is 160°F.

	100	150	220	320
PART NUMBERS	ISO Grade			
Quart	50450	50454	50458	50462
Gallon	50451	50455	50459	50463
5-Gallon Pail	50452	50456	50460	50464
55-Gallon Drum	50453	50457	50461	50465
TYPICAL PROPERTIES				
Viscosity cSt @ 40° C cSt @ 100° C	105 12.1	158 16.1	219 20.4	318 26.9
Viscosity Index	105	106	109	112
Flash Point °F (°C)	500 (260)	503 (261)	507 (263)	510 (265)
Rust Test	PASS	PASS	PASS	PASS
Copper Corrosion	1A	1A	1A	1A

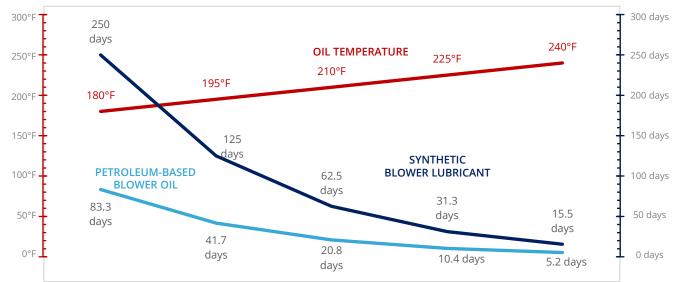
### OIL TEMPERATURE VS OIL LIFE

pdblowers

PREMIUM SYNTHETIC

**BLOWER OIL** 

ISO-220



These guidelines are based on typical performance. Contact pdblowers if you have questions about your specific application.

#### FOOD GRADE OIL AVAILABL

Our pdblowers synthetic oil is also available in a food grade formulation that meets H1 requirements (FDA 21 CFR 178.3570) for lubricants with incidental food contact.

ABLE	100	220	320	
PART NUMBERS	ISO Grade			
Quart	50450.FG	50458.FG	50462.FG	
Gallon	50451.FG	50459.FG	50463.FG	
5-Gallon Pail	50452.FG	50460.FG	50464.FG	
55-Gallon Drum	50453.FG	50461.FG	50465.FG	

