Rolling Oil

Multipurpose Rolling Oil

Rolling Oil is a high-quality, multipurpose rolling oil developed for rolling non-ferrous metals, such as aluminum, brass, copper and copper alloys. It also is recommended for use as a bearing lubricant, hydraulic oil and roll-coating oil in many mill applications.

Rolling Oil is formulated to provide excellent oxidation resistance, wear protection, protection against rust and corrosion, and resistance to foaming. It has excellent water-separating properties to minimize the formation of emulsions. It is nonstaining to aluminum and yellow metals.

Applications

- Hot rolling of non-ferrous metals
- Circulating oil for plain and rolling-element bearings in mill applications
- Hydraulic oil in mill applications
- Roll-coating oil in many mill applications

Rolling Oil meets the requirements of the following industry and OEM specifications:

- U.S. Steel 127, 136
- Vickers (Eaton) I-286-S

Features/Benefits

- Excellent oxidation resistance and thermal stability
- Excellent wear protection for gears and bearings
- Protects against rust and corrosion
- Nonstaining to non-ferrous metals
- Excellent water-separating properties
- Good foam resistance

CONTACT INFORMATION

Phillips66 Lubricants.com

U.S. Customer Service:
1-800-368-7128

Technical Hotline:
1-877-445-9198

International Customer Service:
1-832-765-2500

E-mail address:
lubricants@p66.com

Rolling Oil

Typical Properties

ISO Grade	10	15	46	68	150	320	460
Specific Gravity @ 60°F	0.857	0.854	0.868	0.873	0.882	0.890	0.892
Density, lbs/gal @ 60°F	7.14	7.11	7.23	7.27	7.34	7.41	7.43
Color, ASTM D1500	L 0.5	L 0.5	L 0.5	L 0.5	1.5	2.5	6.0
Flash Point (COC),							
°C	174	182	224	243	260	304	304
°F	345	360	435	469	500	579	579
Pour Point,							
°C	-46	-43	-42	-39	-32	-15	-15
°F	-51	-45	-44	-38	-26	5	5
Viscosity,							
cSt @ 40°C	12.0	16.8	46.0	67.8	149	310	460
cSt @ 100°C	2.9	3.6	6.7	8.6	14.8	23.7	30.1
SUS @ 100°F	69.5	90.5	238	352	782	1,649	2,468
SUS @ 210°F	36.0	38.5	48.7	55.2	78.9	118	148
Viscosity Index	84	92	97	97	98	96	94
Copper Corrosion, ASTM D130	1a	1a	1a	1a	1a	1a	1a
Demulsibility, ASTM D1401,							
minutes to pass	5	5	10	10	10	10	20
Foam Test, ASTM D892	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Four-Ball Wear, ASTM D4172,							
Scar Diameter, mm	0.48	0.45	0.42	0.42	0.42	0.42	0.42
FZG Scuffing Test, ASTM D5182,							
Failure Load Stage	—	10	>12	>12	>12	>12	>12
Oxidation Stability,							
TOST, ASTM D943-04a, hours	12,000	12,000	12,000	12,000	5,000	5,000	2,000
RPVOT, ASTM D2272, minutes	750	750	750	750	600	600	600
Rust Test, ASTM D665 A&B	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Health and Safety Information

For recommendations on safe handling and use of this product, please refer to the Material Safety Data Sheet via *http://w3apps.phillips66.com/NetMSDS.*