



## Ecoterra® Rock Drill Fluid

Phillips 66® Ecoterra® Rock Drill Fluid is a high-quality, adhesive, extreme-pressure (EP) lubricant specially developed for the lubrication of percussion rock drills used surface and underground mining operations. It also is recommended for other air-powered tools such as jackhammers, pavement breakers and drifters. It is formulated with an ashless, chlorine-free additive package for reduced environmental impact.

Ecoterra Rock Drill Fluid is specially formulated with select non-chlorinated additives to provide excellent protection for pneumatic percussion tools. It has high load-carrying capacity to protect against wear and seizure of sliding metal surfaces under heavy or shock-load conditions. It has good adhesiveness to metal surfaces in the presence of moisture, and contains inhibitors to protect against rust and corrosion. It has good oxidation resistance and thermal stability at high temperatures for long service life. The non-chlorinated additive package helps reduce environmental impact in case of leaks or stray mist, and facilitates waste oil disposal.

### Applications

- Pneumatic equipment such as drifters, jackhammers, pavement breakers, rock drills, and stoppers

### Features/Benefits

- Non-chlorinated additive package for reduced environmental impact
- Excellent extreme-pressure properties
- Protects against wear and seizure
- Good adhesiveness to metal surfaces in the presence of moisture
- Good oxidation resistance and thermal stability
- Protects against rust and corrosion
- Low odor
- Low fogging tendency
- Good foam resistance

**Ashless, Non-Chlorinated, Extreme-Pressure Air Tool Lubricant**

KEEPING THE  
WORLD  
RUNNING  
SMOOTHLY. 



### Ecoterra® Rock Drill Fluid

Typical Properties			
ISO Grade	100	150	320
Specific Gravity @ 60°F	0.879	0.884	0.890
Density, lbs/gal @ 60°F	7.32	7.36	7.42
Color, ASTM D1500	3.5	3.5	3.5
Flash Point (COC), °C (°F)	208 (406)	208 (406)	247 (477)
Pour Point, °C (°F)	-36 (-33)	-33 (-27)	-21 (-6)
Viscosity			
cSt @ 40°C	100	150	320
cSt @ 100°C	11.7	15.3	24.7
SUS @ 100°F	520	786	1,701
SUS @ 210°F	66.5	80.9	122
Viscosity Index	105	103	99
Foam Test, ASTM D892, Seq. I, mL	10/0	10/0	10/0
Rust Test, ASTM D665A	Pass	Pass	Pass
Timken OK Load, ASTM D2782, lb	75	75	75

### Health & Safety Information

For recommendations on safe handling and use of this product, please refer to the Safety Data Sheet via <http://www.phillips66.com/EN/products/Pages/MSDS.aspx>.