

## Product Description

D-A **eco-drill**™ is a readily biodegradable rock drill oil specially designed for use in extreme working conditions with percussive pneumatic tools, down-the-hole (DTH), and surface drilling equipment. This lubricant begins with naturally high viscosity index base oils for temperature shear stability and is formulated with our advanced **ChemGuard**™ additive technology.

The D-A **ChemGuard**™ innovative formula has a vigorous EP/ anti-wear inhibitor that reduces welding or scoring when under constant shock and high load situations. D-A **eco-drill**™ protects against rust and corrosion and contains a built-in emulsifier for severe circumstances where water and compressed air co-exist. A robust tackifier is added for the preferred adhesiveness that protects against undesired misting or when water spray is present and sustains its strength where superior lubricity is expected.

D-A **eco-drill**™ is rigorously tested for its performance as well as its environmentally safe components. This product is highly recommended for use in monitored or environmentally sensitive locations.

D-A **eco-drill**™ may also be utilized in Mining, Tunneling, Jack-Hammers, Paving Breakers, Chippers, Tampers, Scalers, Impactors, Roof Bolters, Screamer Pumps and Water Injection Plunger Pumps.

## Product Features and Benefits

- Excellent temperature and shear stability
- Robust tackifier, adheres to metals for decreased galling, shanking or burning of parts
- Exceptional emulsifying agent for enhanced lubricity
- Vigorous **ChemGuard**™ EP/anti-wear additive package
- Readily Biodegradable

## Typical Applications

Readily Biodegradable Air Line lubrication for all Rock Drills. (Also makes an excellent Air Line Oil for pneumatic tools such as Paving Breakers, Hammers, Chippers, Tampers, Scalers, Impactors, etc.).

**eco-drill™** is also an excellent bar oil for chain saws.

### General Remarks:

In extremely cold weather, consult the manufacturer's operating or service manual.

## Typical Properties

ISO Viscosity Grade	Test Method	100	150	220
Viscosity @ 100°C, cSt	ASTM D445	17.8	23.4	28.2
@ 40°C, cSt	ASTM D445	98	156	216
Viscosity Index	ASTM D2270	185	180	175
Pour Point, °F (°C)	ASTM D97	-10 (-23)	0 (-18)	5 (-15)
Flash Point, °F (°C)	ASTM D92	550 (288)	574 (301)	574 (301)
API Gravity	ASTM D4052	19.0	17.9	17.7
Four Ball EP, Weld Load @ 500 kg	ASTM D2783	91.4	91.4	91.4
Four Ball Wear, Scar Dia., mm	ASTM D4172	0.41	0.41	0.41
Falex Pin & Vee Block Max load in lbs.	ASTM D3233	3,500	3,500	3,500

### **D-A Part Number:**

Bulk	14241	14251	14261
Tote – 330 Gal	N/A	14253	N/A
Drum – 55 Gal	N/A	14252	N/A