



## DESCRIPTION

---

**ROCK DRILL 220** which provides effective lubrication and long, trouble free service to air operated equipment is manufactured from oxidation resistant paraffinic base oils and proven rust, oxidation and foam inhibitors and extreme pressure additives.

## CHARACTERISTICS

---

Correct viscosity assures optimum misted lubricant feed from online oilers and other type metering devices so that effective trouble-free lubrication is provided to every lubricated surface of air operated equipment.

Extends life to rock drills and other air tools because the special extreme pressure and anti-wear additives carry the high loads at the tool head. Metal to metal contact is avoided on heavily loaded components during the rotation and sliding motions even when adverse conditions of high temperature and high moisture are encountered.

Minimises deposits through superior rust and oxidation inhibitors and high oxidation stable low carbon residue base oils used in **ROCK DRILL 220**. Thus, the fine clearances of oil misting orifices, valves and passages of the air tools are maintained which otherwise if partially blocked by deposits reduce drilling speeds and possibly promote premature equipment failure. All surface areas are effectively protected against rust formation in the normal moisture laden environments of air operated equipment.

Odour and toxicity are negligible. This is a very important requirement when exhausting oil mist in confined areas and more particularly in underground mining where it is mandatory that the oil misting residues are completely non-toxic.

Emulsion characteristics (emulsibility) are delicately balanced to adequately emulsify water that may enter the drill from the air supply thereby ensuring optimum lubrication under these conditions. Should the demulsibility be too high slugs of moisture in the air line lead to metal to metal contact and thus wear as water rather than lubricant is in contact with moving parts. Likewise, if the Demulsibility is too low, then excessive emulsification occurs which again promotes wear as the water content of the emulsion is too high to sustain full bodied lubrication.

Added adhesiveness further enhances lubrication in the presence of water. The tackiness maintains an oil film to sustain lubrication.

Anti-foam characteristics avoid possible lubrication problems that can eventuate with lubricants, which have not been adequately inhibited against foam.



Typical Characteristics	Methods	Typical Values
Density, Kg/L at 15°C	ASTM D 1298	0.901
Viscosity, cSt at 40°C	ASTM D 445	220
Viscosity, cSt at 100°C	ASTM D 445	19.1
Viscosity Index	ASTM D 2170	102
Pour Point, °C	ASTM D 97	-23
Flash Point, COC °C	ASTM D 92	257
Timken, OK Loads, Kg	ASTM D 2782	34
4 Ball, Wear Scar Dia, mm	ASTM D 2266	0.3
FZG, Stages Passed	DIN 51354	12
Rust Prevention Characteristics	ASTM D 6658	Pass
Sulphur, % Mass	ASTM D 1551	0.399
Phosphorous, % Mass	ASTM D 1091	0.016

The facts stated and the recommendations made herein are believed to be accurate. No guarantee of their accuracy is made however, and otherwise expressly provided in written contract, the products are sold without conditions or warranties, expressed or implied. Purchasers should determine the suitability of such products for their particular purpose.