



Product Application Sheet

76 JM HD Fluid

EMULSIFIABLE EXTREME PRESSURE GEAR LUBRICANT

76 JM HD Fluid is an extreme pressure industrial gear lubricant designed for use in mining equipment and other machinery operating in the presence of water. When contaminated with water, this product will emulsify the water and still provide excellent rust and corrosion protection, as well as retain its extreme pressure properties. It has a high viscosity index for use over a wide temperature range. 76 JM HD Fluid meets the requirements of most models of Jeffrey and Joy mining machines.

TYPICAL APPLICATIONS

Enclosed gear sets of longwall mining machinery.

Enclosed industrial gear sets operating over a wide temperature range in the presence of water.

Gear drives and pinion stands of metal rolling mills, ball mills, cement mills, and paper mills.

Enclosed gear sets of heavy construction and excavation equipment.

CAUTION: Do not use 76 JM HD Fluid in gear boxes that include a wet clutch. Those gear boxes require a non-EP lubricant meeting the Joy TO-M specification, such as 76 Turbine Oil 220.

RECOMMENDED FOR:

AGMA 205.04 Emulsifying EP Gear Oil
Jeffrey Division, Indresco, Mining Machinery
Joy Mining Machinery Specifications:
TO-HD (ISO VG 460)
TO-HEP (ISO VG 320)
TO-MEP (ISO VG 220)

OUTSTANDING FEATURES

- ◆ Outstanding load-carrying capacity and protection against scuffing and wear
- ◆ Emulsifies readily to provide lubrication even in the presence of water
- ◆ Excellent rust and corrosion protection
- ◆ Excellent service over a wide temperature range
- ◆ Non-corrosive to bronze or brass at normal operating temperatures (under 225°F)
- ◆ Good foam resistance

DESCRIPTION

76 JM HD Fluid is formulated with high quality paraffinic base oils and selected additives that provide excellent lubrication even in the presence of water. Extreme pressure additives provide outstanding load-carrying capacity to protect gear teeth against scuffing and wear and to provide a greater safety margin during high peak and shock loads. When contaminated with water, this product will emulsify the water and maintain its high

film strength as well as provide excellent rust and corrosion protection. 76 JM HD Fluid has a low pour point and a high viscosity index to provide excellent service over a wide temperature range. It is non-corrosive to steel or bronze under normal operating conditions. A foam inhibitor prevents excessive foam buildup that can interfere with proper lubrication.

TYPICAL INSPECTION TESTS:

Grade, ISO	220	320	460
Grade, AGMA	5EP	6EP	7EP
Product Code	52050	52120	52110
Density, g/cm ³ @ 15°C	0.889	0.899	0.905
Color, ASTM	4.0	----	----
Flash Point, COC, °C (°F)	238 (460)	238 (460)	238 (460)
Pour Point, °C (°F)	-24 (-11)	-18 (0)	-15 (5)
Viscosity			
cSt @ 40°C	220	320	430
cSt @ 100°C	20.5	31.2	36.4
SUS @ 100°F	1,157	1,673	2,267
SUS @ 210°F	103	152	177
Viscosity Index	102	135	128
Copper Corrosion, ASTM D130	1B	1B	1B
Demulsibility, ASTM D1401, ml free water			
@ 1 hr	0	0	0
@ 24 hrs	0	0	0
@ 48 hrs	0	0	0
EP Load, Pin & V Block, ASTM D3233B, lbs	3,250	3,250	3,250
Foam Test, ASTM D892	Pass	Pass	Pass
Rust Test, ASTM D665A & B	Pass	Pass	Pass
Timken OK Load, lb	65	65	65