



Gulf Harmony

Premium quality rust & oxidation (R&O) inhibited multipurpose lubricating oils

Product Description

Gulf Harmony series are premium quality multipurpose lubricating oils intended for use in hydraulic systems in industrial and mobile service, compressors, turbines, circulating systems and spur, helical, bevel & worm gearboxes where R&O type of oils are required. These oils are blended from high quality base oils and a proven additive system to provide superior oxidation stability, rust & corrosion protection, foam control and moderate wear protection. They also possess good water separation and rapid air release properties. These oils are available in ISO 15 through ISO 460 viscosity grades. They exceed the performance requirements of DIN 51524 Part 1-HL, ISO 11158-HL, AFNOR NFE 48-603 (HL) and Cincinnati Lamb (formerly Cincinnati Machine) P-38, P-54, P-55 & P-57.

Features & Benefits

- Superior thermo-oxidative stability minimises sludge & varnish formation and resists oil degradation leading to longer service life.
- Excellent demulsibility helps in faster separation of water from oil
- Special rust & corrosion inhibitors protect critical components even in severe operating conditions
- Effective foam control and rapid air release properties ensure trouble-free operations

Applications

- Hydraulic systems in industrial and mobile service requiring R&O type of oils
- Also recommended for a wide variety of following industrial applications requiring R&O type of oils:
 - Circulating oil systems
 - Air compressors
 - Gear sets not requiring EP properties
 - Plain and rolling element bearings
 - Steam and Water turbines
 - General Machine lubrication

Specifications, Approvals & Typical Properties

ISO Viscosity grades	15	22	32	46	68	100	150	220	320	460	
Specifications											
DIN 51524 Part 1-HL	X	X	X	X	X	X	X				
ISO 11158-HL	X	X	X	X	X	X	X				
AFNOR NFE 48-603 (HL)	X	X	X	X	X	X	X				
Cincinnati Lamb			P-38	P-55	P-54		P-57				
Typical Properties											
Test Parameters	ASTM Method	Test Values									
Viscosity @ 40 °C, cSt	D 445	15.1	22.2	31.2	45.9	68.3	98.3	148.9	221	321.1	467
Viscosity Index	D 2270	97	98	100	100	99	97	96	96	95	95
Flash Point, °C	D 92	164	186	202	210	218	230	246	256	266	280
Pour Point, °C	D 97	-24	-24	-21	-18	-15	-12	-9	-6	-6	-3
Density @ 15°C, Kg/l	D 1298	0.858	0.865	0.87	0.874	0.881	0.886	0.89	0.894	0.898	0.902
Rust Test	D 665A/B	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Emulsion Test 30 minutes max	D 1401	@ 54 °C	Pass	Pass	Pass	Pass	Pass	-	-	-	-
		@ 82 °C	-	-	-	-	-	Pass	Pass	Pass	Pass
Foam Test, foam after 10 minutes of settling for all sequences	D 892	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Turbine Oil Stability Test, hrs	D 943	1000+		1500+			1000+				

December 2009

Properties mentioned above are typical only and minor variations, which do not affect the product performances, are to be expected in normal manufacturing. The above information is based on past history of the grade only and must not be construed as a guarantee of performance. Follow equipment manufacturer's recommendations for performance level and viscosity grade. The Material Safety Data Sheet for this product is available from your nearest Gulf Distributor.

Gulf Oil International

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