

RUBRIC CLEAN HM

High Performance Lubrication

DESCRIPTION

RUBRIC CLEAN HM is a premium, anti-wear hydraulic oil specifically designed to prevent varnish from depositing on internal system components in hydraulic systems. **RUBRIC CLEAN HM** is the second part of a Hydraulic Clean Package that consists of the cleaner **RUBRIC R-CLEAN** and **RUBRIC CLEAN** hydraulic oils.

ADVANTAGES

- Prevents the formation of varnish and sludge deposits
- Keeps hydraulic components clean
- Extended pump protection
- Lowers maintenance and downtime costs
- Provides excellent wear protection
- Excellent oxidation and thermal stability
- Protects metal surfaces from rust and corrosion
- Excellent filtration properties
- Maintains cycle times with clean equipment
- Enables hydraulic systems to operate in their designed specification

PERFORMANCES

RUBRIC CLEAN HM fulfils the most common specifications and OEM requirements:

- Parker Denison HF-0
- MAG IAS (ex Cincinnati Machine) P-68, P-69, P-70
- DIN 51524 part 1 (HL), 2 (HLP)
- Eaton Brochure 03-401-2010 (ex-Eaton Vickers M-2950-S / I-286-S)

APPLICATIONS

- In order to guarantee the best performance and a perfectly clean hydraulic system, **RUBRIC CLEAN HM** should only be used in either new or cleaned equipment.
- The best way to prepare for the usage of **RUBRIC CLEAN** hydraulic oil is a treatment with the **RUBRIC R-CLEAN** hydraulic systems cleaner.

TECHNICAL INFORMATION

Test		Test Method	RUBRIC CLEAN 32	RUBRIC CLEAN 46	RUBRIC CLEAN 68
Viscosity, cSt at 40 °C		ASTM D445	31.5	45.6	69.5
Viscosity, cSt at 100 °C		ASTM D445	5.6	6.9	9.3
Viscosity Index		ASTM D2270	117	107	110
Density at 20 °C		ISO 12185	0.853	0.860	0.862
Colour		ASTM D1500	0.5	0.5	0.5
Pour Point, oC		ASTM D97	-33	-33	-34
Flash Point, oC		ASTM D92	230	246	238
Acid Number		ASTM D664	0.7	0.7	0.9
Rust Test (Distilled water / Synthetic Sea Water)		ASTM D665A/D665B	Pass/Pass	Pass/Pass	Pass/Pass
Foam, Seq I, II, III	Sequence I, mls	ASTM D892	0-0	0-0	0-0
	Sequence I, mls		0-0	0-0	0-0
	Sequence I, mls		0-0	0-0	0-0
Copper Corrosion		ASTM D130	1A		1A
Denison Filtration	Filtration time without water, seconds	A-TP-02100	146/146	146/146	
	Filtration time with 2% water, seconds		163/164	163/164	
Filterability	Dry Stage I & II, %	ISO 13357			89/82
	Wet Stage I & II, %		78/47		
Demulsibility, mL oil-mL water-mL emulsion (min)		ASTM D1401	41-39-0 (15)		0-39-41
TOST Oxidation life, hours		ASTM D943	7050	6500	
TOST Oxidation (1000 hrs)	Acid Number, mg KOH/g		0.34	0.34	
	Insoluble sludge, mg		39.4	39.4	
	Total copper wt. loss, mg		215	215	
Thermal Stability (168 hrs @ 135 °C)	Sludge, mg/100 mL	ASTM D2070	1.8	1.8	
	Copper Weight Loss, mg		0.2	0.2	
	Steel Rod Rating				
	Copper Rod Rating		3	3	
Hydrolytic Stability	Copper wt. loss, mg/cm2	ASTM D2619	-0.0556	-0.0556	
	Acidity of water layer, mg KOH		0	0	
FZG Fail Load Stage		DIN 51354-2	12	12	
Air Release at 50 °C			2.1	3.2	13.8
4 Ball wear test	Weld load	ISO 20623			160
	Wear (1h at 40 kg), mm		0.49	0.48	0.5
Brugger test, N/mm²				20.95	22

SERVICE AND EQUIPMENT

In addition to its product ranges, MotulTech can provide tools and services for the maintenance and in-use monitoring of your lubricants. Please contact your technical sales representative.

IMPORTANT NOTICE

All information and rules about health, safety and the environment are mentioned on the safety data sheet. It provides information about risks, safety procedures and first aid emergency rules. It clarifies all procedures to implement in the case of an accidental spillage, and for the disposal of the product and its effects on the environment.

Our product contains natural additives which are likely to modify the colour of the concentrates without altering its performance. The specifications of our products are definite only at the time of order, and are subject to our general sale and guarantee conditions. To give our customers the latest technical developments, the general characteristics of our products may vary. The safety data sheet of this product is available at www.motul.com