

## RUBRIC CLEAN HM 46

HYDRAULIC CLEAN TECHNOLOGY

## MINERAL BASE

### 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.

For all types of hydraulic systems, verins working in very severe conditions :  
Construction machinery, farm machinery, industrial equipment...  
Suitable for all types of pumps: axial pistons, radial pistons, gear systems, blades.

### BENEFITS

- Prevents the formation of varnish and sludge deposits
- Keeps hydraulic components clean
- Extended pump protection
- Provides excellent wear protection
- Excellent oxidation and thermal stabilit
- 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

### PERFORMANCE DESCRIPTION

- Contains a special "stabilized Zinc" additivation.
- Very good anti-wear properties which increase the pumps life.
- Resistance to oxidation : Long drain oil.
- Anti-corrosion, Anti-rust, Anti-foam.
- Good filtering capacities.
- Stability under hydrolysis.

## TECHNICAL INFORMATION

NAME	METHOD	RUBRIC CLEAN HM 46
Density at 20°C (68°F)	ISO 12.185	0.860 kg/L
Viscosity at 40°C (104°F)	ASTM D445	45.6 mm <sup>2</sup> /s
Viscosity at 100°C (212°F)	ASTM D445	6.9 mm <sup>2</sup> /s
Viscosity Index	ASTM D2270	107.0
Flash point	ASTM D92	246.0 °C
Pour point	ASTM D97	-33.0 °C
4 Ball test	ISO 20.623	0.48 mm Wear (1h at 40 kg)
FZG Load stage		
Thermal Stability (168 hrs @ 135 °C)	ASTM D2070	1.8 mg/ 100 mL (Sludge) / 0.2 mg (Copper Weight Loss) / 3 (Copper Rod Rating)
Demulsibility	ASTM D1401	
Brugger Test		20.95
Foam, Seq I, II, III	ASTM D892	0-0 Sequence I, mls / 0-0 Sequence II, mls / 0-0 Sequence III, mls
Copper Stripe Corrosion	ASTM D130	
Air Release		3.2 at 50 °C
Hydrolytic Stability (168 hrs @ 135 °C)	ASTM D2619	-0.0556 mg/ cm <sup>2</sup> Copper wt. loss / 0 mg KOH Acidity of water layer
Rust Test (Distilled Water/ Synthetic Sea Water)	ASTM D665 A/B	Pass/Pass
TOST Oxidation (1000 hrs)		
TOST Oxidation Life	ASTM D943	6,500.0 hours
Acid Number	ASTM D664	0.7

## INSTRUCTIONS

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.

## SERVICES AND EQUIPMENT

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

RECOMMENDATIONS

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](http://www.motul.com)