

# MAK HYDROL XHD

## Description

MAK HYDROL XHD is premium quality extra heavy duty hydraulic oil produced with severely hydrotreated high quality base oils combined with special ashless additive system. It has excellent oxidation resistance that ensures an extended ageing stability, and possesses improved antiwear & corrosion-protective properties. This product is specifically tailored to offer higher load carrying capacity, improved oxidation and thermal stability over conventional hydraulic oils available in the market.

## Application

MAK HYDROL XHD is recommended for all kinds of modern Industrial and mobile hydraulic systems of different construction types operating under high speeds, loads and temperatures. These oils are recommended for electro-hydraulic systems and numerically controlled (NC) machine tools, where there is a demand for additional anti wear protection and long service life.

MAK Hydrol XHD grades are also recommended for the lubrication for rotors, bearings and gears in rotary compressors like screw and vane type rotary compressors.

## Benefits

- Improved oxidation and thermal stability of product extends oil ageing thus reduce equipment downtime and maintenance cost. It has TOST (Oxidation test) life of more than 5000 hrs.
- Higher load carrying capacity can help to protect the components from damage and increases equipment's service life.
- Reduced deposit formation and improved filterability characteristics with special ashless additive system.
- Excellent water separability and air release properties.
- Superior anti rust and corrosion property, protecting the hydraulic system internal surfaces.

## Performance Level

- DIN 51524 Part II
- Denison HF-0
- IS : 11656-1986 (Reaffirmed 2002)

## Technical Specifications

Characteristics	Test method	MAK HYDROL XHD 68
Appearance	Visual	Clear & Bright
Density @29.5°C, Kg/m <sup>3</sup>	ASTM D1298	0.850
Kinematic Viscosity @40°C, cSt	ASTM D 445	68.5
Kinematic Viscosity @100°C, cSt	ASTM D 445	9.3
Viscosity Index	ASTM D 2270	113
Flash point, °C	ASTM D 92	246
Pour point, °C	ASTM D 97	-18
Copper corrosion test, 3hrs, 100°C	ASTM D 130	1a
Rust preventive characteristics	ASTM D 665	Pass
Foaming, (Tendency/ Stability), ml/ml	ASTM D 892	
Sequence I		10/0
Sequence II		0/0
Sequence III		10/0

All the mentioned values are typical which may vary from batch to batch.

## Storage and Handling

- Indoor Storage is always preferable
- Barrels should be kept horizontally with bunk position at 3 O'clock 9 O'clock position
- Barrels should be kept away from dusty or heated areas.
- During handling any contact with dust must be avoided.

## Health and Safety

These oils are not hazardous under normal conditions of use. For further guidance appropriate Material Safety Data Sheet (MSDS) may be referred.

## Advice

For any further advice on applications or otherwise please contact the nearest Bharat Petroleum Territory Office or Technical Services Department at the address given below.

### **Bharat Petroleum Corporation Ltd.**

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