



MAK THERMOL

Heat Treatment

Description

MAK THERMOL is made up of superior quality hydro finished base oils and contains special additives. Use of these oils facilitates fast quenching through proper controlled cooling. These oils are premium quality accelerated quenching oils permit uniform hardening with minimum distortion and discoloration, while improving grain structure and achieving long service life.

Application

MAK Thermol 68 is used as quenching medium in general heat treatment applications where lower quenching speed is desired. MAK Thermol 22 & 32 are used as quenching medium for accelerated quenching operations.

Benefits

- Exceptionally good oxidation & chemical stability
- Excellent Thermal stability
- Non corrosive & non toxic
- Controlled hardness
- low vapour pressure so resists cracking
- Rust inhibition
- Excellent thermal conductivity
- Low volatility minimises the formation of volatile decomposition products

Performance Level

- IS 2664: 1980 [Reaffirmed Nov., 1998]
Our grades meet the above specification for the respective viscosity grades.

Technical Specifications

Characteristics	ASTM	MAK THERMOL		
		22	32	68
Appearance	--	Light brown clear fluid	Light brown clear fluid	Light brown clear fluid
Density at 15° C	D1296	0.8791	0.8819	0.890
K.V at 40° C, cSt	D445	22.3	32.1	64.5
Viscosity Index	D2270	102	100	101
Pour Point, °C	D97	-9	-9	-6
Flash Point, (COC), °C	D92	192	196	230
Copper Strip Corrosion Test at 100°C for 3 hrs.	D130	1b	1b	1b

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 bung position at 3'o'clock 9 'o clock position
- Barrels should be kept away from dusty or heated areas as much as possible
- 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 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.

Product and Application Development Dept.
 BPCL 'A' Installation, Sewree Fort Road, Sewree (East)
 Mumbai -400015
 E-mail: MAKcustomercare2@bharatpetroleum.in
 Tel No.: 022-24176351