



MAK PROCESSOL R

High quality general purpose machinery oil

MAK Processol R oils are a range of high quality oils for general purpose applications. The oils have low sulphur content and high viscosity index with inherent anti-oxidation and anti-rust properties which ensure protection of equipment/ machinery from rust and corrosion even during idle periods. These oils offer high film strength providing extra protection. MAK Processol R oils are also compatible with the seal materials and paints normally specified for use with mineral oils.

Grades – MAK Processol R oils are available in the following ISO VG grades – **32, 46, 68, 100, 150, 220 and 320.**

Applications:

MAK Processol R oils are specially developed for use by Indian Railways as Oil Machinery/General Purpose Machinery Oil. Heavier grades of MAK Processol R oils can be used in the lubrication of small open gears under light duty conditions.

Performance/ Benefits:

High Oxidation and Thermal Stability – very high resistance to oxidation, chemical and thermal break down. Resists sludge and deposit formation. Has the capability to work under varied operating temperatures. Ensures reliability, longer operating life and less maintenance.

Good Viscosity-Temperature Characteristics – maintains viscosity under widely varying operating conditions and helps the equipment to perform to its design standards.

Strong Rust & Corrosion Protection – oil forms a protective barrier on the metal surface and prevents rusting and corrosion. Fewer unscheduled stoppages and lower maintenance costs.

Excellent Lubrication – strong and thick oil film formed on the surface prevents the metal parts from coming in contact with each other and offers excellent lubrication properties.

Low Foaming Tendency – the high quality base oils used enables quick air release and offers low foaming tendencies thereby ensuring excellent machinery lubrication.

Specification:

- IS:493: 1981 (Part II) (Reaffirmed 2014)

Storage & Handling:

The product should be stored inside. Keep it properly sealed to avoid contamination. Avoid freezing. Shelf life is 3 yrs. under protected storage conditions.

Health & Safety:

These oils are unlikely to be hazardous when properly used in recommended applications. Contamination of the coolant from other oils, greases, chemicals, dirty water etc. can occur during the use. It should be avoided. Regular monitoring of the in-use product is recommended.

Typical Physico-Chemical Data: MAK Processol R

Characteristics	Method	32	46	68	100	150	220	320
Appearance	Visual	Clear & Bright	Clear & Bright	Clear & Bright	Clear & Bright	Clear & Bright	Clear & Bright	Clear & Bright
Density @15°C, g/cc	ASTM D1298	0.8819	0.8827	0.8835	0.8876	0.8946	0.8996	0.9046
Kinematic Viscosity @40°C, cSt	ASTM D445	32.1	46.2	68.4	100.7	150.9	220.8	320.6
Kinematic Viscosity @100°C, cSt	ASTM D445	5.36	6.74	8.70	11.30	14.24	18.83	27.31
Viscosity Index	ASTM D2270	102	100	100	98	97	95	94
Inorganic Acidity mg KOH/g	ASTM D972	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Saponification Value	ASTM D664	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Pour Point, °C	ASTM D97	-6	-6	-6	-3	-3	-3	-3
Flash Point, COC, °C	ASTM D92	202	218	236	244	248	250	258
Copper Corrosion, 100°C, 3 hrs.	ASTM D130	1a	1a	1a	1a	1a	1a	1a
Rust Preventive Characteristics	ASTM D665	Pass	Pass	Pass	Pass	Pass	Pass	Pass