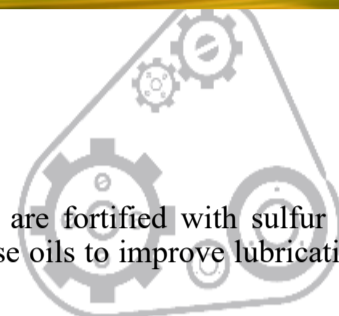




STRAIGHT CUTTING OIL MOTOROL ProCut



Introduction:

MOTOROL ProCut grades are a blend of refined mineral oils and additives. These oils are fortified with sulfur and chlorine to impart extreme pressure (EP) properties. High quality fatty oils are added to these oils to improve lubrications under boundary conditions and also to impart wetting characteristics.

Applications:

MOTOROL ProCut 14 is light colored low viscosity oil recommended for use in machining all non ferrous metals except Titanium. These oils have good heat transfer properties to effectively cool under high speed condition.

MOTOROL ProCut 21 contain chlorinated EP and oiliness additives. This oil is recommended for machining operation in ferrous materials like mild steel, carbon steel, manganese steel, nickel, steel copper, aluminum and their alloys.

MOTOROL ProCut 23 has a distinct advantage of being equality suitable for cutting either steel as it contains additives, which imparts high oiliness as well as EP properties, mainly sulfur in inactive form. This oil gives good cooling, chip flushing and penetration and is suitable for high speed automatic machine tools. Also recommended for use in capstan and turret Lathe.

MOTOROL ProCut 55 is medium viscosity dark brown oil containing active sulfur and chlorinated compound additives, thus having staining type EP Additives. This oil is recommended for severe machining operation like broaching, gear cutting grinding and cutting.

MOTOROL ProCut 38 & 68 are mineral oil based neat cutting oil contain non active sulfurized fatty oils and EP additives, which are applicable for cold forging operation.

Performance Standard:

Meets IS: 3065-1985

Typical Specifications:

Sr. No.	Characteristics	Test Methods	14	21	23*	38	55	68
1	Kinematic Viscosity at 40 °C, cSt	ASTM D 445	13-16	20-22	23-25	35-40	35-40	65-75
2	Flash Point, °C	ASTM D 92	130	150	170	190	190	190
3	EP Value Kgs (4 ball test), Min	ASTM D 2783	750	850	650	1000	850	1000
4	Copper Corrosion at 100°C for 3 hrs.	ASTM D 130	1A	1A	1A	1B	4C	1B
5	SAP Value, mgKOH/g	ASTM D 94	10	18	10	20	18	20

Environment, Health & Safety:

Every care has been taken to ensure the accuracy of the information in this PDS. This however may be affected by subsequent improvement in product (R&D). MSDS is available for all MOTOROL products on request.

MOTOROL products are unlikely to present any health and safety hazard with proper use for the correct application and maintain proper personal hygiene. Do not Spill oils on the shop floor, discharge into drains, ground or water sources.