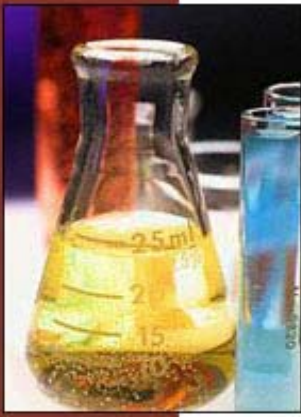


Macson 4495 Cutting Oil



This base lubricant combines six different chemical additives that provide maximum performance on difficult machining operations.

When 5 or 10 parts of paraffin oil are mixed with 1 part of Macson 4495 oil, sufficient lubrication is provided for any average machining operation. When used straight it solves difficult tapping, broaching, and threading operations. When mixed with other cutting oils, it helps eliminate trouble spots in any machining operation.

For:

- | | |
|-------------|-----------------------------------|
| * BROACHING | * MACHINING DIFFICULT ALLOYS |
| * TAPPING | * HONING & GRINDING |
| * THREADING | * ADDITIVE FOR OTHER CUTTING OILS |

Macson 4495 is a concentrated cutting oil used in the manufacture of regular cutting oils and can be used straight to handle difficult machining operations.

GUIDE TO APPLICATIONS:

- MACSON 4495 mixes readily with any paraffin oil or cutting oil. The average machining operation can be handled with a mixture of 5 parts of plain paraffin oil to 1 part of MACSON 4495. More difficult operations may require heavier mixes. If heat dissipation is a problem, use a lower viscosity oil, such as mineral seal oil.
- When to use Straight: Where chip welding is severe, as in certain tapping operations. MACSON 4495 in its undiluted form, will help solve the machining problems. MACSON 4495 is used primarily for manual application to tools by dipping. It has outstanding adhesion to metal and solves tapping operations where ordinary lubricants fail.
- Forming Operations: The excellent extreme pressure characteristics and moderate viscosity make it ideal for severe stamping and drawing operations. It prevents pick-up on the die and ensures a smooth finish for the draw.
- Honing and Grinding: On honing operations, mix MACSON 4495 with kerosene in concentrations ranging from 3 to 10 parts kerosene to 1 part 4495. For thread grinding and other form grinding operations, mix 3 to 5 parts MACSON 4495 with 1 part conventional oil.
- Metals Used On: Stainless steels, tool steels, high carbon alloys and other hard to machine metal will benefit from the special chemical lubricants present in 4495 as it contains high amounts of active sulfur. This will darken copper, bronze or silver parts unless they are immediately degreased following the machining operation. Exercise caution on bronze, brass, copper or silver parts.

- Controlling Chip Welding: The ideal tool lubricant, from a performance and economy viewpoint, is one that contains just enough extreme pressure additives to prevent chip welding. In working with Macson 4495 you can use this as a guide to improve your machining operations. Simply add the 4495 to your conventional oil or to a paraffin oil until you reach the point at which chip welding stops. You then have the correct mixture, from both an economy and a performance viewpoint.
- Wide Range of Application and Troubleshooting: MACSON 4495 is recommended as a troubleshooting oil for difficult machining operations. There are cases in which incorrect tool design or faulty machine set up make it impossible to obtain satisfactory production results. If various mixes of MACSON 4495 show no difference in performance, from a length of tool life viewpoint, it is an indication that you must improve some other phase of the operation before working on the tool lubricant problem. MACSON 4495 should be stocked as any other machine tool, so that it will be available to help for the trouble that arises when metals run slightly out of specification or when some other trouble develops in the operation.

TYPICAL PROPERTIES

Viscosity @ 100 °F, S.U.S	700
Flash, C.O.C °F	420
Color	8
Specific Gravity @ 60°F	0.983
Wt./Gal @ 60°F	8.20
Active Sulfur	1.6%
Chlorine	13.5%
Fatty Oil	21.9%