

Macson 437 Synthetic Coolant



Macson 437 is a true synthetic metalworking fluid that provides heavy duty grinding and cutting performance.

When used for grinding, the fluid provides effective cooling and cleanliness and will not foam. It precipitates swarf rapidly and does not leave a sticky, or hard, salt-like deposit on machines or parts. The dried residue from the coolant is fluid and oily.

It is effective for grinding and machining of ferrous and non-ferrous metals.

SPECIAL FEATURES

1. Will not emulsify with tramp oils so that tramp oil can be skimmed off without affecting coolant.
2. Excellent rust protection for cast iron at a 1:20-30 ratio.
3. Non-gumming. Residue is fluid and not sticky.
4. No degreasing is necessary for parts machined with **MACSON 437**.
5. Machines stay clean.
6. No smoke or oil mist. Does not contain oil.
7. Easy mix in all waters up to 500 ppm. water hardness.
8. Long coolant life. **MACSON 437** contains two bactericides that inhibit bacteria, algae and fungus growth when used at 20 to 1 ratio.
9. Excellent anti-foam control for high volume grinding operations.

Application Water

Recommended Use in

Grinding	1:25 – 40
Cast Iron Machining	1:20 – 30
General Machining	1:20 – 30
Light Duty Blanking & Forming	1:10 – 20

Typical Physical Properties

Fluid type	Synthetic
Appearance	Yellow green liquid
Odor	Bland
Specific Gravity @ 60° F.	1.07
Weight per gallon, lbs.	8.92
pH of Concentrate	9.80
pH of 20:1 dilution (5%)	9.20

CHART FOR EVALUATING MACSON 437 COOLANT STRENGTH

Dilution Ratio	% Solution	Refractive Index
10:1	10.0	4.00
15:1	6.7	2.75
20:1	5	2.00
30:1	3.3	1.50
40:1	2.5	1.00
50:1	2.0	0.75

INSTRUCTIONS FOR USING MACSON 437 SYNTHETIC COOLANT

1. Check coolant/water ratio daily with refractometer, at the beginning of each shift. Generally machines will only require water.
2. Where practical, a 55 gallon drum of pre-mix solution can be kept on hand for make-up additions. Make-up solutions are more dilute than the starting solution because evaporation of water takes place during metal working operations. A good guide to make-up solutions is as follows:

If the starting solution is 1:10, use a make-up solution of 1:15.
If the starting solution is 1:20, use a make-up solution of 1:30.
If the starting solution is 1:30, use a make-up solution of 1:45.
3. When it is necessary to clean machine sumps, lines and areas not reached by flow, circulate Baum's Heavy Duty Cleaner 150 AF (at 1 to 10 ratio) for a minimum of 30 minutes. Make sure all chips and fines are removed from corners and between tank baffles. The quickest procedure is accomplished by the use of a high pressure cleaner.
4. Drain system and circulate fresh water for 10 to 15 minutes.
5. Fill machine again with fresh water, add MACSON 437 TO BRING SOLUTION TO CORRECT RATIO FOR PARTICULAR OPERATION. (See chart for refractometer reading of solution strength.)
6. Turn coolant pump on and circulate for 10 minutes before starting to grind or machine. Make sure coolant nozzles provide generous flood at point of contact.