



Commonwealth WS 8590

Heavy Duty Oil-Rejecting Synthetic Machining and Grinding Fluid



WHAT IT DOES:

Commonwealth WS 8590 is a heavy-duty, oil-rejecting synthetic machining and grinding fluid formulated for use on ferrous metals. This unique product provides superior cooling and extreme pressure properties needed for use on high alloyed ferrous metals, such as stainless steel. This product does not contain chlorinated, sulfurized, or phosphorus containing additives or DEA. **Commonwealth WS 8590** is fortified against attack from micro-organisms.

WHERE TO USE IT:

Commonwealth WS 8590 is recommended for use on ferrous metals including high alloyed ferrous metals such as stainless steel.

PERFORMANCE BENEFITS:

Commonwealth WS 8590 has been specifically formulated to deliver the following performance benefits:

- Superior Tool Life
- Non-Tacky Residue
- Excellent Sump Life
- Operator Friendly
- Non-Foaming
- Excellent Corrosion Protection



2080 FERRISS ROAD NORTH, HARROW, ONTARIO, CANADA N0R 1G0

519-738-3503 • 800-265-3689 • FAX- 519-738-3335 inquiries@commonwealthoil.com • www.commonwealthoil.com

Commonwealth WS 8590



TECHNICALLY SPEAKING:

Property	Commonwealth WS 8590
Appearance	Clear blue liquid
pH @ 5%	8.7
Refractive Index (RI) Factor	Multiply RI by 2.5 for concentration %
Density, lbs./US Gallon	8.83
Specific Gravity	1.06

These are typical figures and do not constitute a specification.

	Recommended Concentration	Refractometer Reading
Grinding	3 – 5%	1.2 – 2.0
Milling, Drilling, Turning	6 – 10%	2.4 – 4.0
Tapping, Reaming, Sawing	6 – 10%	2.4 – 4.0

Handling & Safety Information

For information on the safe handling and use of this product, refer to the Safety Data Sheet obtainable from Commonwealth Oil Corporation.

Proper Mixing and Care of Coolants

- ◆ Always pre-mix before adding it to the machine.
- ◆ If mixing by hand, always **add the coolant concentrate** to water, and then agitate.
- ◆ For best results a proportioner should be used.
- ◆ Since water evaporates from the coolant, the concentration will increase over time. To maintain the recommended concentration, makeup coolant should be pre-mixed at half the % concentration as the initial refill.
- ◆ Protect product from freezing.



The Effects of Water Quality on Emulsion Stability

To obtain the best performance from any water miscible metalworking fluid, good quality water is essential. Water hardness is a key determinate of water quality. It is typically measured in parts per million (PPM) of calcium carbonate and varies by region of the country. The ideal water hardness range is between 75 PPM and 175 PPM. For soft water (less than 75 PPM), the metalworking fluid may foam. Exceptionally hard water (above 200 PPM) can have a de-stabilizing effect on the coolant. For high water hardness, we recommend using a hard water version of our coolant. In addition to water hardness, high levels of chloride ions can adversely affect the rusting inhibiting characteristic of the coolant. Our lab can help you determine the quality of your water.

Available in Pails, Drums and One-Way Bulk Containers

2080 FERRISS ROAD NORTH, HARROW, ONTARIO, CANADA N0R 1G0
519-738-3503 • 800-265-3689 • FAX- 519-738-3335 inquiries@commonwealthoil.com • www.commonwealthoil.com