

SPIRIT 500 S



METALWORKING



TOTAL

General-Duty, Semi-Synthetic, Micro-Emulsion for Ferrous & Non-Ferrous Metals.

APPLICATIONS

- **SPIRIT 500 S** is a translucent, semi-synthetic coolant concentrate, which is easily diluted with water in all ratios. When diluted, it forms a clear light yellow coolant with high heat transfer properties. **SPIRIT 500 S** shows exceptional service life in machine reservoirs. The sump life is insured by fortification with biocide and the buffering capability of the dilution.
- **SPIRIT 500 S** dilutions provides excellent interim rust protection for both the workpiece and the machines in which it is used.
- **SPIRIT 500 S** is used on all cutting operations on all ferrous and non-ferrous metals. It will not stain aluminum or copper.
- Operations include: general machining such as sawing, drilling, turning, boring, milling, reaming, trepanning, OD and ID grinding, centerless grinding, surface grinding, broaching, gear cutting, tapping, and threading.

ADVANTAGES

- Resistant to microbiological growth.
- Extreme pressure and anti-wear agents.
- Increases tool life, prevents ridging, promotes good surface finish.
- Excellent lubricity properties--Increases the tool life on a large scale of cutting parameters maintaining an additive layer on the chip / workpiece / tool surface.
- Non-foaming. Non-staining.
- Contains no sulfur, chlorine, nitrites, phenols, or diethanolamine.
- Permits operator surveillance of the workpiece at all times.
- Non-flammable and non-toxic.
- Splits out tramp oil quickly.
- Settles metal fines rapidly and keeps grinding wheels clean.
- Excellent for recycling.

| TYPICAL CHARACTERISTICS | SPIRIT 500 S |
|-----------------------------|---------------------|
| | |
| Appearance | Clear Yellow Liquid |
| Density @ 60 °F, lbs./gal. | 8.53 |
| Specific Gravity @ 60/60 °F | 1.024 |
| Flash Point, COC, °F | None |
| Copper Strip Corrosion | 1A - 1B |
| Sulfur, %wt. | None |
| Chlorine, %wt. | None |
| pH @ 10% | 9.4 |
| Refractive Index Factor | 1.89 |
| Refractive Index @ 5% | 2.7 |
| Refractive Index @ 10% | 5.3 |

Standard dilution of water to oil is 20:1. May be mixed satisfactorily from 10:1 to 25:1 depending on the type and severity of the operation. For grinding operations, 25 to 30 parts water to 1 part **SPIRIT 500 S** is recommended. The concentration should be adjusted as necessary to maximize performance.

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