

VULSOL 13 S



METALWORKING



Heavy-Duty, Synthetic, Micro-Emulsion for Ferrous and Non-Ferrous Metals.

APPLICATIONS

- **VULSOL 13 S** is a transparent yellow, fully synthetic, high performance water based drawing fluid. It is formulated with specially selected synthetic lubricity agents, rust and corrosion inhibitors.
- **VULSOL 13 S** contains no sulfur or chlorine, therefore it can be used for ferrous as well as non-ferrous applications. It is an environmentally friendly compound that exhibits very good lubricity, anti-wear performance, wetting and cooling properties. It also provides improved surface finishes, rust protection, longer die life, longer sump life, and prevents bacteria from growth and rancidity.
- **VULSOL 13 S** is primarily recommended for heavy drawing and stamping of nickel plated steel to form battery cans. It is used at a concentration of 7% in water and has successfully replaced heavily sulfo-chlorinated emulsions. This product can be used straight or further diluted with water depending on the severity of the operation.

ADVANTAGES

- Excellent lubricity, anti-wear, and friction control.
- Increases die 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.
- Sulfur and chlorine free.
- Non-staining.
- Environmentally safe.
- Permits operator surveillance of the workpiece at all times.
- Light viscosity means good flushing ability.

TYPICAL CHARACTERISTICS	VULSOL 13 S
Appearance	Clear Light Yellow Liquid
Density @ 60°F, lbs./gal.	8.52
Solution, 1:7 (12.5%) with water	Clear
Sulfur, %wt.	None
Chlorine, %wt.	None
Hard Water Stability, 300 ppm	Excellent
pH 1:7 (12.5%) with water	9.5

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