



Innovation in Metalworking Fluids



Chip Rite 411

General Purpose Semi-Synthetic Cutting and Grinding Fluid

Description

Chip Rite 411 is a general purpose semi-synthetic fluid, formulated to provide both lubrication and cooling properties. Forming a translucent microemulsion when added to water, Chip Rite 411 will protect machines from corrosion, reduce foaming, and provide excellent finishes on the final part.

Application

Chip Rite 411 is recommended for use in most general machining operations including, but not limited to: CNC machining, sawing/cut-off, turning centers, milling, drilling, profiling, surface and finish grinding, and tapping.

Typical Properties

Property	Results
<i>Concentrate Appearance</i>	Clear amber liquid
<i>Emulsion Appearance</i>	Translucent
<i>Specific Gravity</i>	0.995 @ 68 °F
<i>Bulk Density</i>	8.3 lbs/gallon @ 68 °F
<i>pH @ 5% dilution</i>	9.30 typical
<i>Refractive Index Factor</i>	2.2

Performance Features and Benefits

- Good lubrication and cooling properties provide extended tool-life and great finishes.
- Excellent hard water stability and microbial control provide extended fluid-life.
- Less downtime and mess due to low foaming properties, non-staining of non-ferrous metals, and corrosion protection of ferrous metals.

Directions for Use

Machine Operation	Recommended Concentration*
<i>Grinding</i>	3 – 5%
<i>CNC Machining</i>	5-10%
<i>Milling/Drilling/Turning Centers/Sawing</i>	5-8%
<i>Tapping</i>	5-10%

*Dependent on type of metal being machining. Lower concentration for Carbon Steels and Cast Irons; higher concentration for high alloys and stainless steels. Tool steels and Aluminum alloys fall in the middle of the range.

Always add Chip Rite 411 concentrate to water, NOT water to concentrate. Proper maintenance is essential for extended coolant life; control concentration with a refractometer and remove tramp oils to ensure the product is operating to its highest potential.

Consult product SDS for complete product safety information.