AQUABOND
Chemistry for Tomorrow

EZ Draw® Synforge 2000 is a graphite-free, water-based synthetic metal-forming lubricant engineered to deliver a high-tenacity protective film capable of withstanding extreme temperatures up to 1177 °C. Its advanced polymer chemistry provides exceptional boundary lubrication, reduced die wear, and clean-running performance without the residue, smoke, or environmental burden associated with oil-based or graphite-containing lubricants. Designed for high-load drawing, forging, and precision forming, EZ Draw® Synforge 2000 enables manufacturers to achieve tighter tolerances, longer tool life, and significantly lower operating costs.

Comparison Chart: Water-Based Lubricant vs. Oil-Based Lubricant (with Graphite)

Performance Factor	Water-Based Synthetic (EZ Draw® Synforge 2000)	Oil-Based Lubricant (with Graphite)
Base Chemistry	Water-based synthetic polymer	Petroleum oil + graphite solids
Thermal Stability	Up to 1177 °C protective film	Typically 400–650 °C before breakdown
Film Characteristics	High-tenacity, clean, uniform	Heavy, dirty, carbon-rich residue
Lubricity Under Load	Excellent boundary lubrication; stable at extreme pressures	Good, but graphite can shear inconsistently
Tool & Die Wear	Significantly reduced due to clean film and thermal stability	Higher wear due to abrasive graphite particles
Residue / Cleanup	Minimal residue; easy water cleanup	Heavy black residue; requires solvents or mechanical cleaning
Environmental Impact	Low VOC, no petroleum, no graphite dust	High VOC, oil mist, graphite particulate contamination
Worker Safety	No smoke, no carbon dust, no oil mist	Smoke, fumes, airborne graphite particles
Process Consistency	Highly consistent film formation	Variable film thickness due to graphite settling
Compatibility with Metals	Ferrous & non-ferrous	Primarily ferrous
Cost of Disposal	Low (water-based waste stream)	High (oil-contaminated waste + graphite solids)
Overall Operating Cost	Lower	Higher