

Craft Metalworking Fluid Overview Chart

Product	Type	Physical Chemistry	Rust Protection	Falex Pin Max Passload	Torque (pounds)	Starting Dilution	Rust Protection Break Point	Humidity Cabinet or ASTM D4627-97	Emulsion Stability	Notes
<p>Full synthetic grinding fluids are used where a variety of grinding tasks are performed. They can handle light, medium and heavy operations, giving smooth finishes and a longer wheel life. Rancidity and dermatitis are efficiently controlled to promote a longer sump life. Rust protection is superior at a cost-effective dilution. Grit and small metal particles settle readily to keep the entire system cleaner. Low foaming means no silicones are necessary during production.</p>										
GR-100	Grinding Fluids	Full Synthetic	Superior	N/A	N/A	3%	3%	ASTM D4627-97	N/A	Job shopper grinding fluid
GR-200	Grinding Fluids	Full Synthetic	Superior	N/A	N/A	3%	3%	ASTM D4627-97	N/A	Precision grinding (excellent swarf dropout)
<p>Semi-synthetic grinding and machining fluids are used where a variety of tasks are performed. They can handle light, medium and heavy operations, giving smooth finishes and a longer tool life. Rancidity and dermatitis are efficiently controlled to promote a longer sump life. Rust protection is good to excellent at a cost-effective dilution. Low foam means no silicones are necessary.</p>										
Aqua Lube 500	Machining Fluids	Semi-Synthetic	Excellent	4500	63	5%	5%	144 hours Humidity Cabinet	Nil/Nil No Cream	For band saw operations. Good in hard water with high chlorine content.
Aqua Lube 700	Machining Fluids	Semi-Synthetic	Good	4500	63	5%	3%	ASTM D4627-97	Nil/Nil No Cream	Good machining for ferrous, non-ferrous, aluminum.
Aqua Lube 800	Machining Fluids	Semi-Synthetic	Good	4500	63	4%	3%	ASTM D4627-97	Nil/Nil No Cream	Non staining on aluminum alloys 1000 7075 6061 Good finish hard & soft alloys
Aqua Lube 900	Machining Fluids	Semi-Synthetic	Good	4500	63	5%	3%	ASTM D4627-97	Nil/Nil No Cream	Non staining on aluminum alloys 1000 7075 6061 Good finish hard & soft alloys (Biostatic)
<p>Full-synthetic machining fluids are used in a variety of machining tasks. They can handle light, medium and heavy operations, giving smooth finishes and a longer tool life. Aqua Lube 1100 is biostatic and controls rancidity and dermatitis to promote a longer sump life. Rust protection is superior. Low foam even at high pressure.</p>										
Aqua Lube 1100	Machining Fluids	Full-Synthetic	Superior	4500	60	3%	3%	ASTM D4627-97	Nil/Nil No Cream	Non staining on aluminum alloys 1000 7075 6061 Good finish hard & soft alloys (Biostatic)
<p>Soluble-Oil machining fluids are used for lightweight to heavy-duty jobs and a variety of tasks. They are usually used to provide smoother finishes and a longer tool life for soft materials. Aqua Lube 1200 is formulated to control rancidity and dermatitis for a longer fluid life. Rust protection is excellent. Always add fluid to water - in that order - or product may gel and fail.</p>										
Aqua Lube 1200	Machining Fluids	Soluble Oil	Excellent	4500	56	3%	3%	ASTM D4627-97	Nil/Nil No Cream	Non staining on aluminum alloys 1000 7075 6061 Superior finish hard & soft alloys
<p>Soluble-Oil stamping compounds are used for light to heavy-duty jobs and a variety of tasks. They are usually used to provide smoother finishes and a longer tool life for soft materials. Aqua Lube 1500 is formulated to control rancidity and dermatitis for a longer fluid life. Rust protection is excellent. Always add fluid to water - in that order - or product may gel and fail.</p>										
Aqua Lube 1500	Stamping Compounds	Soluble Oil	Superior	Refer to TCT data sheet	N/A	6%	10%	> 48hrs Humidity Cabinet	Nil/Nil No Cream	Light to medium stamping. Good Cooling capabilities.
Aqua Lube 1600	Stamping Compounds	Soluble Oil	Superior	Refer to TCT data sheet	N/A	6%	16%	> 48hrs < 56hrs Humidity Cabinet		Heavy duty stamping for high alloy steels.
Aqua Lube 2000	Stamping Compounds	Organic Soap	Superior	Refer to TCT data sheet	N/A		N/A	N/A	Dilutes Freely, No Oils	N/A
Aqua Lube 2500	Stamping Compounds	Straight Oil	Excellent	Refer to TCT data sheet	N/A	Neat	N/A	N/A	Non-Emulsifiable	Heavy duty stamping for heavy steal alloys (neat).

Water-based rust inhibitors are an effective way to provide rust protection without the cost and subsequent clean-up associated with oil-based rust inhibitors. High dilution rates provide excellent rust protection at an extremely low use cost. RP-33 is intended for cold-dip operations. RP-50 is intended for cold/hot dipping or spraying operations. Clean-up is as simple as a clear water rinse.										
RP-33	Rust Inhibitors	Water Based w/ Nitrites	Excellent	N/A	N/A	3%	3%	ASTM D4627-97	Dilutes Freely, No Oils	N/A
RP-50	Rust Inhibitors	Water Based Non-Nitrite	Excellent	N/A	N/A	2%	2%	ASTM D4627-97	Dilutes Freely, No Oils	Non-Nitrated for hot & cold bath.
RP-201	Rust Inhibitors	Water Based, Non-Nitrite, Non-Boron	Superior	N/A	N/A	5%	5% gives 5-day humidity cabinet protection.		Dilutes Freely, No Oils	Non-Nitrated for hot & cold bath.
Soluble Oil rust inhibitors are the most effective way to protect against rust. Solubility provides maximum protection with cost-effective dilution rates.										
RP-1000	Rust Inhibitors	Soluble Oil	Excellent	N/A	N/A	10%	10% 35 days 15% 55 days 20% 60 days Salt Spray 10% 24 hrs 15% 40 hrs 20% 64 hrs	Humidity Cabinet Humidity Cabinet Humidity Cabinet Humidity Cabinet Salt Spray Salt Spray Salt Spray	Nil/Nil No Cream	For long term indoor storage