

# Cleaning Technology You Can Count On



#### Formulatory Expertise & Quality Manufacturing

QualiChem's state of the art manufacturing facility utilizes a precision manufacturing process to blend our products to tight quality control parameters as defined and affirmed through our ISO 9001:2015 Certification.

#### **Product Stewardship**

Human and Environmental Safety is our foremost objective during the research, development and manufacturing of our products. QualiChem's drive to deliver high performance is equaled only by our commitment to health, safety and environmental responsibility.

#### **Comprehensive Technical Support**

QualiChem provides complete technical, sales and laboratory support for all of our cleaners. Our experienced sales engineers have the manufacturing knowledge and industry experience to recommend the best QualiChem product to maximize performance and cost-effectiveness for any cleaning process.

To determine the best cleaner for your process, please contact your local QualiChem Distributor or QualiChem Sales Engineer.



You may use this QR code to go directly to our online Cleaner Selection Survey form. Fill out and submit the form. A QualiChem Sales Engineer will contact you directly.

The following easy-to-use selection guide will help to identify the products best suited for your needs. Each cleaner is listed by its primary application:

- Spray Wash Cleaners
- Immersion Cleaners
- Maintenance Cleaners

- Ultrasonic Cleaners
- Acid Cleaners
- Machine Tool Cleaners

- Vibratory Cleaners
- Floor Cleaners
- Solvent Cleaners

# **Cleaners Selection Guide**

PRODUCT / DESCRIPTION	CHEMISTRY <sup>1</sup>	TYPE	CONC. RANGE	AVG.OPER. pH	OPERATING TEMP. RANGE	METAL SAFETY	SOILS REMOVED	CLEANING POWER & PERFORMANCE BENEFITS
MET-KLEEN 105 Alkaline Spray Wash and Rust Preventative	Oil-rejecting	Liquid	3-5%	10.5	100°-140°F (38°-60°C)	• Fe	Cutting fluids Oil Drawing & polishing compounds Carbon Organic & inorganic materials	Light to Moderate Duty  • Specifically formulated for single stage washers where the fluid need to clean and provide rust protection  • Low foaming with excellent oil rejection for easy skimming  • Silicate-free
MET-KLEEN 110S Economical Spray Wash Cleaner	Oil-dispersing	Liquid	3-10%	10.8	100°-160°F (38°-71°C)	• AI • Fe • Yellow metals	Cutting fluids Gil Drawing & polishing compounds Carbon & baked on residues Organic & inorganic materials	Moderate Duty  General purpose cleaner and rust preventative  For use in all types of industrial spray wash applications from single stage washer to multi-stage washer and intensive flood washers  Low foaming  Long bath life
MET-KLEEN 120S Low Residue Spray Wash Cleaner	Oil-rejecting	Liquid	3-10%	9.8	100°-140°F (38°-60°C)	• Fe	Cutting fluids Gil Garbon Organic & inorganic materials	Light Duty     Silicate-free multi-purpose cleaner with superior in-process corrosion protection (Better rust protection than MET-KLEEN 110S)     For use in all types of industrial spray wash applications from single stage washer to multi-stage washer and intensive flood washers     Low foaming with excellent oil rejection for easy skimming     Long bath life     Moderate pH reduces possibility of skin irritation
MET-KLEEN 130N Heavy Duty Alkaline Metal Cleaner	Oil-rejecting	Liquid	2-10%	11.0	100°-180°F (38°-82°C)	• AI • Fe • Yellow metals	Cutting fluids Grease & oil Drawing & polishing compounds Carbon & baked on residues Organic & inorganic materials	Heavy Duty  Multi-metal cleaner with good rust protection  Low foaming with excellent oil rejection for easy skimming
MET-KLEEN 140 Aluminum Spray Cleaner	Oil-dispersing	Liquid	2-10%	12.2	100°-140°F (38°-60°C)	• AI • Fe • Yellow metals	Cutting fluids Grease & oil Drawing & polishing compounds Carbon & baked on residues Organic & inorganic materials	Moderate Duty  • Multi-metal cleaner with superior in-process corrosion protection.  Best option for aluminum  • Low foaming  • Long bath life  • May also be used in immersion and ultrasonic cleaning applications
MET-KLEEN 146 Heavy Duty, Low Residue, Spray Wash Ferrous Metal Cleaner	Oil-rejecting	Liquid	2-10%	11.4	100°-180°F (38°-82°C)	• Fe	Cutting fluids Grease & oil Drawing & polishing compounds Carbon & baked on residues Organic & inorganic materials	Heavy Duty  Silicate-free cleaner with superior in-process corrosion protection Removes "varnished" oils  Low foaming with excellent oil rejection for easy skimming May also be used in immersion cleaning applications

<sup>&</sup>lt;sup>1</sup> Oil-rejecting cleaners split oils to the top for easy skimming. Oil-dispersing cleaners break up the soil into fine particles, which are then suspended and flushed off the surface. Emulsifying cleaners break up and suspend loosened dirt to keep it from settling back on the cleaned surface.

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MET-KLEEN 150 Extra Heavy Duty Spray Wash Metal Cleaner	Oil-rejecting	Liquid	2-10%	11.2	100°-180°F (38°-82°C)	• Al • Fe • Yellow metals	Cutting fluids Grease & oil Drawing & polishing compounds Carbon & baked on residues Organic & inorganic materials	Extra Heavy Duty  • Multi-metal cleaner with in-process corrosion protection  • Very low foaming with excellent oil rejection for easy skimming  • High alkalinity requires non-ferrous metals to be rinsed to prevent staining  • May also be used in immersion cleaning applications
MET-KLEEN XHP Extreme High Pressure Spray Wash Cleaner	Oil-rejecting	Liquid	3-5%	8.1-8.5	100°-150°F (38°-66°C)	• AI • Fe • Yellow metals	Cutting fluids Oil Carbon Organic materials	Light Duty  For use in enclosed spray washers operating at 2,000-10,000 psi  Low foaming eliminates foam-outs  Excellent short-term corrosion protection  Highly resistant to bacterial and fungal attack  Low pH promotes operator acceptance and reduces the possibility of skin irritation
ULTRASONIC CLEAN								
PRODUCT / DESCRIPTION	CHEMISTRY <sup>1</sup>	TYPE	CONC. RANGE	AVG.OPER. pH	OPERATING TEMP. RANGE	METAL SAFETY	SOILS REMOVED	CLEANING POWER & PERFORMANCE BENEFITS
MET-KLEEN 113 Ultrasonic Immersion Metal Cleaner	Oil-dispersing	Liquid	2-10%	8.9	Ambient	• Al • Fe • Yellow metals	Cutting fluids     Organic & inorganic materials	Light Duty  • Multi-metal cleaner with good rust protection
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VIBRATORY CLEANE	_	=110=						
PRODUCT / DESCRIPTION	CHEMISTRY <sup>1</sup>	TYPE	CONC. RANGE	AVG.OPER. pH	OPERATING TEMP. RANGE	METAL SAFETY	SOILS REMOVED	CLEANING POWER & PERFORMANCE BENEFITS
MET-KLEEN 935	Oil-dispersing	Liquid	2-5%	7.7	Ambient	Al     Fe     Yellow metals	Cutting fluids     Organic materials	Light Duty  Mild alkaline, multi-metal cleaner with in-process corrosion protectors where the service is the service of the se

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PRODUCT / DESCRIPTION	CHEMISTRY <sup>1</sup>	TYPE	CONC. RANGE	AVG.OPER. pH	OPERATING TEMP. RANGE	METAL SAFETY	SOILS REMOVED	CLEANING POWER & PERFORMANCE BENEFITS
MET-KLEEN 118 Multi-Purpose Metal Cleaner	Oil-dispersing	Liquid	3-9%	8.9	100°-140°F (38°-60°C)	• Al • Fe • Yellow metals	Cutting fluids Oil Carbon Organic materials	Light to Moderate Duty     Superior in-process corrosion protection     Very operator friendly due to low pH and mild alkalinity     May also be used in spray wash and ultrasonic cleaning application.
MET-KLEEN 130E Emulsifying Multi-Metal Soak Tank Cleaner	Emulsifying	Liquid	2-9%	10.9	100°-180°F (38°-82°C)	• AI • Fe • Yellow metals	Cutting fluids Grease & oil Drawing & polishing compounds Carbon & baked on residues Organic & inorganic materials	Moderate to Heavy Duty  • Emulsifies free oils so they do not redeposit onto parts  • Good rust protection  • May also be used in spray wash cleaning applications
RUST KLEEN 165 Alkaline Rust Stripper	Oil-rejecting	Liquid	30-50%	13.6	180°- 200°F (82°- 93°C)	• Fe	• Rust	Heavy Duty     Designed to remove red rust from ferrous parts     Rapid stripping action with no corrosive fumes. Does not require special tank linings or neutralizing after stripping     May also be used in spray wash cleaning applications
RUST KLEEN 175 Neutral pH Rust Stripper	Oil-rejecting	Liquid	10-30%	6.9	140°F-200°F (60°- 93°C)	• Fe	• Rust	Moderate Duty • Very operator friendly due to neutral pH and easy disposal

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<b>Q-BRITE 180</b> Acid Descaler for Spray Washers	Oil-dispersing	Liquid	5-10%	1.4	Ambient-180°F (82°C)	• Al • Fe	Scale     Inorganic deposits	Heavy Duty     Dissolves hard water salts, rust and scale build-up typically found to clog nozzles and lines in spray washers after extended use     Works in less than one hour     Inhibited to reduce acid attack on the metal equipment
<b>Q-BRITE 542</b> Rust Stripper and Brightener	Emulsifying	Liquid	3-5%	2.4	Ambient-200°F (93°C)	• Fe	• Rust	Light to Moderate Duty  Used to brighten tungsten carbide  May be used in immersion cleaning applications
<b>Q-BRITE 986</b> Burnishing Compound and Brightener	Oil-dispersing	Liquid	3-5%	3.2	Ambient-200°F (93°C)	• Al • Fe • Yellow metals	• Tarnish	Light to Moderate Duty  • Brightens weathered or tarnished material such as copper and brass
RUST KLEEN 936 Acid Rust Stripper	Oil-dispersing	Liquid	5-40%	1.2	Ambient-180°F (82°C)	• Fe	• Rust	Moderate Duty  • Can be used up to 180°F (82°C) to enhance rust stripping efficiency • Inhibited to reduce acid attack on the metal equipment

<sup>&</sup>lt;sup>1</sup> Oil-rejecting cleaners split oils to the top for easy skimming. Oil-dispersing cleaners break up the soil into fine particles, which are then suspended and flushed off the surface. Emulsifying cleaners break up and suspend loosened dirt to keep it from settling back on the cleaned surface.

FLOOR CLEANERS						
PRODUCT / DESCRIPTION	TYPE	CONC. RANGE	AVG.OPER. pH	OPERATING TEMP. RANGE	SOILS REMOVED	CLEANING POWER & PERFORMANCE BENEFITS
CITRUS CUTTER Premium All Purpose Maintenance and Floor Cleaner	Liquid	1-10%	11.3	Ambient Non-flammable	Cutting fluids Grease & oil Drawing & polishing compounds Carbon & baked on residues Organic & inorganic materials	Moderate Duty  Biodegradable, general purpose cleaner and degreaser  For use in automatic floor scrubbers and mop buckets as well as spray bottles and hand cleaning applications. Our most popular floor cleaner with pleasant citrus odor  Highly concentrated, cost-effective and free of glycol ethers
TUFF CUT 9700R Economical Floor Cleaner	Liquid	2-10%	9.9	Ambient Non-flammable	Cutting fluids     Grease & oil     Drawing & polishing compounds     Carbon & baked on residues     Organic & inorganic materials	Light Duty     Highly concentrated, universal, non-butyl cleaner and degreaser for use in automatic floor scrubbers and mop buckets. May also be used in immersion cleaning applications as well a pressure washers, spray bottles and hand cleaning applications     Operator-friendly with mild pH and pleasant odor     Silicate-free
TUFF CUT HDF Heavy Duty Floor Cleaner	Liquid	2-10%	12.2	Ambient Non-flammable	Cutting fluids     Grease & oil     Drawing & polishing compounds     Carbon & baked on residues     Organic & inorganic materials	Heavy Duty  • Universal cleaner and degreaser for plant floors with lots of grease, oil, tire marks, etc. For use in automatic floor scrubbers and mop buckets as well as spray bottles and hand cleaning applications  • Highly concentrated, cost-effective  • Silicate-free
MAINTENANCE CLEA	NERS					
PRODUCT / DESCRIPTION	TYPE	CONC. RANGE	AVG.OPER. pH	OPERATING TEMP. RANGE	SOILS REMOVED	CLEANING POWER & PERFORMANCE BENEFITS
CITRUS CUTTER Premium All Purpose Maintenance and Floor Cleaner	Liquid	1-10%	11.3	Ambient Non-flammable	Cutting fluids     Grease & oil     Drawing & polishing compounds     Carbon & baked on residues     Organic & inorganic materials	Moderate Duty Biodegradable, general purpose cleaner and degreaser For use in automatic floor scrubbers and mop buckets as well as spray bottles and hand cleaning applications. Our most popular floor cleaner with pleasant citrus odor Highly concentrated, cost-effective and free of glycol ethers
TUFF CUT 900	Liquid	1-10%	12.6	70°- 200°F (21°- 93°C)	Cutting fluids	Heavy Duty

CITRUS CUTTER Premium All Purpose Maintenance and Floor Cleaner	Liquid	1-10%	11.3	Ambient Non-flammable	Cutting fluids Grease & oil Drawing & polishing compounds Carbon & baked on residues Organic & inorganic materials	Moderate Duty     Biodegradable, general purpose cleaner and degreaser     For use in automatic floor scrubbers and mop buckets as well as spray bottles and hand cleaning applications. Our most popular floor cleaner with pleasant citrus odor     Highly concentrated, cost-effective and free of glycol ethers
TUFF CUT 900 General Purpose Cleaner	Liquid	1-10%	12.6	70°- 200°F (21°- 93°C)	Cutting fluids     Grease & oil     Drawing & polishing compounds	Heavy Duty  High pH, silicated cleaner for general maintenance and floor cleaning Rinses off easily and leaves no residue Can be used safely on ferrous and non-ferrous metals
TUFF CUT HDS  Heavy Duty Cleaner and Degreaser	Liquid	2-10%	12.5	Ambient Non-flammable	Cutting fluids Grease & oil Drawing & polishing compounds Carbon & baked on residues Organic & inorganic materials	Heavy Duty     Versatile cleaner with unsurpassed degreasing properties. Highly effective at removing difficult soils from a variety of hard surfaces. One of the most powerful cleaners on the mark     Highly concentrated and cost-effective     May also be used in automatic floor scrubbers and mop buckets
TUFF CUT SW All Purpose Spray and Wipe Cleaner	Liquid	Neat	12.0	Ambient Non-flammable	Cutting fluids     Grease & oil     Organic materials	Moderate Duty     Universal, non-butyl cleaner for tough cleaning applications. Instantly dissolves greasy, oily soils leaving a clean surface. Can be diluted when full strength is not required.  Highly concentrated, cost affective.

Highly concentrated, cost-effective

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<b>EQO-KLEEN SMP</b> Operator Friendly and Environmentally Friendly Sump Cleaner	Liquid	3-10%	9.5	Ambient-180°F (82°C)		Cutting fluids     Grease & oil     Drawing & polishing compounds     Carbon & baked on residues     Organic & inorganic materials	Moderate Duty  Specifically designed to be environmentally safer than traditional harsh sump cleaning chemistrie  Formulated without the use of caustics, silicates, phosphates, glycol ethers or alkyl-phenol surfactan  Operator friendly due to mild pH and pleasant citrus odor  Low foaming with excellent corrosion protection and low residue formula for easy rinsing  May also be used in immersion cleaning applications as well as spray washers, pressure washers and automatic floor scrubbers
MET-KLEEN 155 Machine Tool Cleaner and Central System Cleaner	Liquid	1-10%	11.3	Ambient-180°F (82°C)		Cutting fluids Grease & oil Drawing & polishing compounds Carbon & baked on residues Organic & inorganic materials Light rust	Heavy Duty     Low foam cleaner designed to optimize the cleaning of baked on grease and carbon, hardened deposits of chips and swarf, oily and gummy deposits as well as grit and dirt from all machine surfaces     May also be used in immersion cleaning applications as well as spray washers, pressure washers and automatic floor scrubbers
MET-KLEEN 157 Machine Tool Cleaner and Central System Cleaner	Liquid	1-10%	11.3	Ambient-180°F (82°C)		Cutting fluids     Grease & oil     Drawing & polishing compounds     Carbon & baked on residues     Organic & inorganic materials     Light rust	Heavy Duty     Low foam cleaner designed to optimize the cleaning of baked on grease and carbon, hardene deposits of chips and swarf, oily and gummy deposits as well as grit and dirt from all machine surfaces     Green Seal approval for strict environmental compliance     May also be used in immersion cleaning applications as well as pressure washers and automatic floor scrubbers
SOLVENT CLEANERS							
PRODUCT / DESCRIPTION		YPE Kb VALUE <sup>2</sup>	OPERATING TEMP.	& FLASH PT.	METAL SAFETY	SOILS REMOVED	PERFORMANCE BENEFITS
CITRA-SOLV 320 Parts Washing Solvent Cleaner	Aliphatic hydrocarbo and citrus b		TEMPERATURE: Amb FLASH POINT: >141°		All metals	Straight cutting oils     Grease & oil     Drawing & polishing compounds     Organic materials	Non-chlorinated solvent with excellent solvency     Rapid cleaning     Improved cleaning capabilities compared to traditional hydrocarbon solvents     Formulated for use in parts washers, but may also be brushed, swabbed or sprayed on manual
ULTRA SOLV 563 Low Odor Parts Washing Solvent Cleaner	Aliphatic hydrocarbo	32 n	TEMPERATURE: Amb Flash Point: 109°F		All metals	Straight cutting oils     Grease & oil     Drawing & polishing compounds     Organic materials	Non-chlorinated solvent with very good solvency     Produces fast-drying, residue-free parts     May also be brushed, swabbed or sprayed on manually
ULTRA SOLV 568 Low Odor Parts Washing Solvent Cleaner	Aliphatic hydrocarbo	31 n		TEMPERATURE: Ambient FLASH POINT: 153°F (67°C)		Straight cutting oils     Grease & oil     Drawing & polishing compounds     Organic materials	Non-chlorinated solvent with good solvency Produces moderate-drying, residue-free parts Ships as non-hazardous due to a high flash point May also be brushed, swabbed or sprayed on manually
ULTRA SOLV 569 Low Odor Parts Washing Solvent Cleaner	Aliphatic hydrocarbo	28 n	TEMPERATURE: Amb FLASH POINT: 204°F		All metals	Straight cutting oils     Grease & oil     Drawing & polishing compounds     Organic materials	Non-chlorinated, low hazard solvent with moderate solvency Produces slower-drying, residue-free parts Ships as non-hazardous May also be brushed, swabbed or sprayed on manually

<sup>&</sup>lt;sup>2</sup> Kb value is an international, standardized measure of solvency power. The higher number indicates more solvency and better cleaning performance.



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