

TECHNICAL DATA SHEET

QUENCH-KLEEN® 5343

POST-QUENCH LOW RESIDUE ALKALINE SPRAY CLEANER

QUENCH-KLEEN 5343 is a non-MEA, non-nitrited, low residue, alkaline spray cleaner with short-term in-plant rust protection. QUENCH-KLEEN 5343 presents no barrier to subsequent coating and has proven to be an excellent alternative to the use of solvent emulsion cleaners.

QUENCH-KLEEN 5343 is particularly effective in cleaning quench oils and splitting them out of solution.

Up to 1 week corrosion protection. QUENCH-KLEEN® 5343 has FORD TOX 197415 approval.

Applications

QUENCH-KLEEN 5343 is the ideal product to use to remove shop soils such as quench oils, soluble coolants cutting oils and metal forming compounds.

QUENCH-KLEEN 5343 may be used in all stages of multi-stage washers. It is also effective in spray washers with high pressure nozzles with pressures of 40 psi to 250 psi.

Recommendation For Use

QUENCH-KLEEN® 5343 is designed to be used as a spray cleaner at concentrations of 3% to 5% by volume, depending upon the soil being removed and the metal being processed. The operating temperature ranges from 70°F to 140°F.

Benefits

- Effectively replaces solvent emulsions and silicated cleaners.
- Excellent cleaning of quench oils by splitting them out of solution.
- May be used at ambient temperatures to dramatically reduce energy costs.
- Incorporates a balance of detergency and surfactancy to provide more effective cleaning.
- Splits tramp oil which allows for skimming and an extended sump life which reduces chemical costs.

Health, Safety and Handling

Please consult the Safety Data Sheet (SDS) for information on storage, safe handling and disposal. The conditions or methods of handling, storage, use and disposal of the product are beyond our reasonable control - we assume no liability for any ineffectiveness of the product or any injury or damage, arising out of or in connection with these conditions.

Typical Physical Properties

PROPERTY	TYPICAL VALUE	UNIT
Appearance	Clear to pale yellow liquid	
pH	10.2 ± 0.2	2% concentrate
Phosphates, Nitrites, MEA	None	
Solubility	Freely soluble in water	

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TECHNICAL DATA SHEET

QUAKERCLEAN® 624 MPC CLEANER AND METAL PRESERVATIVE

QUAKERCLEAN® 624 MPC is a dual purpose, mild alkaline liquid that simultaneously cleans and protects metal surfaces in a single processing step.

Applications

QUAKERCLEAN® 624 MPC is designed for ferrous (steel and cast iron) alloys and non-ferrous (aluminum) alloys. It's unique chemical engineering allows it to offer the additional benefit of non-foaming with application pressures in excess of 2,500 psi (172 BAR), and excellent oilsplitting characteristics. It has been field proven to clean at ambient temperatures.

Customers

- Bosch
- Honda
- General Motors
- Meritor
- JTEKT
- Volvo

Corporate Approvals

- Chrysler NPM No. 12-270-1290
- General Motors HMCS ID No. 1181319

Benefits

- Cleaning at ambient temperatures provides energy cost savings
- Product will provide 30-60 days of corrosion protection to the metal surface when not rinsed
- Mild alkalinity is safe for use on ferrous and non-ferrous metals, this single product can be used for two applications reducing inventory and costs
- Moderate pH makes it very worker compatible and microbiologically stable

Health, Safety and Handling

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Properties

PROPERTY	TYPICAL VALUE	UNIT
Appearance	Clear to slightly hazy light yellow	
Pounds per gallon at 60°F	8.93	lbs/ gal
Neat pH at 77°F	10.5	
Flash Point via COC	Boils at 100 / 212	°C/°F
Odor	Amine	
pH (5% distilled water)	9.8	
Appearance (10% dilution)	Clear, light yellow solution	



QUAKERCLEAN® 624 MPC

CLEANER AND METAL PRESERVATIVE

Fluid Maintenance

This product can be used in one- or multi-stage spray and immersion systems as defined below.

SPRAY EQUIPMENT

Concentration	3-5% by Volume
Temperature	Ambient to 140°F
Pressure	5-3,000 psi
Contact Time	Dependent on soil condition of part

IMMERSION EQUIPMENT

Concentration	4-8% by Volume
Temperature	Ambient to 150°F
Contact Time	2 - 10 minutes

Water rinsing is not necessary, as the residual film will provide short-term indoor corrosion protection. An Alkalinity Titration to determine the concentration of this product is available upon request. Please consult with your Quaker Houghton representative.

Cleaning and Protecting

To clean and protect after the metal removal operation, use QUAKERCLEAN® (cleaners) and FERROCOTE® (corrosion preventives) to enhance process compatibility. Consult your Quaker Houghton representative.

QUAKERCLEAN® 624 MPC does not contain any strong acids, strong alkalis, nonylphenol ethoxylates (NPEs), solvents, ozone depleting compounds, silicates, phosphates or chelating agents.

No VOC at recommended use concentration and temperature. QUAKERCLEAN® 624 MPC has a mild operating pH and is nonflammable and noncombustible. Effective cleaning at ambient temperatures reduces energy costs. Excellent oil splitting characteristics extends bath life to reduce waste generation, waste treatment costs, disposal costs and water consumption.

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TECHNICAL DATA SHEET

QH EXOMAX™ P 2510

NON-SILICATED IMMERSION CLEANING COMPOUND

QH EXOMAX™ P 2510 is an alkaline liquid immersion cleaning compound. It is free rinsing and will not leave a residue which could effect finishing operations, such as plating. There are no chelants in QH EXOMAX™ P 2510 (such as EDTA, NTA, HEDTA or glucoheptonate) commonly used in cleaning formulas. This product does not contain citric acid..

Applications

QH EXOMAX™ P 2510 is designed to remove lapping compounds, polishes, grinding fluids, and general shop soils. It will not attack aluminum or aluminum alloys.

Recommendation For Use

QH EXOMAX™ P 2510 should be used in immersion systems between 2 - 10% concentration. The operating temperature ranges from 100° - 180°F.

Benefits

- Outstanding cleaning capability for optimal soil removal
- Works on a wide variety of alloys which reduces costs via consolidation of products and purchases

Health, Safety and Handling

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Typical Physical Properties

PROPERTY	TYPICAL VALUE	UNIT
Appearance	Clear, pale straw liquid	
pH (2% solution)	9.4	
Specific Gravity	1.10	
Solubility	Miscible with water in all proportions	
Silicates	None	

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TECHNICAL DATA SHEET

QH EXOMAX™ P 2512

LIQUID DETERGENT SOAK CLEANER

QH EXOMAX™ P 2512 is a liquid cleaner which has been formulated to provide high surface activity, penetration, and detergency for soak, vibratory and barrel cleaning operations.

Applications

QH EXOMAX™ P 2512 is recommended for the removal of cutting oils, coolants, buffing compounds and general shop dirt.

QH EXOMAX™ P 2512 can be used on ferrous metals, copper, aluminum and zinc. Non-ferrous metals should be processed at lower concentration ranges.

Recommendation For Use

QH EXOMAX™ P 2512 is designed to be used as a soak cleaner at 3 - 10% concentration and a vibratory cleaner at 1 - 5% concentration. The operating temperature ranges from ambient to 140°F.

Up to 2 weeks corrosion protection.

Benefits

- Outstanding cleaning capability for optimal soil removal
- May be used at ambient temperatures to dramatically reduce energy costs
- Imparts corrosion inhibition to parts to protect them from rusting between operations thereby reducing scrap rates
- Corrosion inhibitors also prevent flash rusting of your machinery
- Works on a wide variety of alloys which reduces costs via consolidation of products and purchases

Health, Safety and Handling

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Typical Physical Properties

PROPERTY	TYPICAL VALUE	UNIT
Appearance	Clear yellow liquid	
pH (2% solution)	9.2	
Solubility	Freely soluble in water	
Rinsability	Free rinsing	
Metals	Ferrous metals, copper alloys and aluminum	

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TECHNICAL DATA SHEET

QUAKERCLEAN® 680 VDA SPRAY AND PROCESS CLEANER

QUAKERCLEAN® 680 VDA is specifically designed for low-residue and vacuum drying applications.

Applications

QUAKERCLEAN® 680 VDA is formulated to dry rapidly without leaving unwanted visual residues behind. QUAKERCLEAN® 680 VDA cleans mild to moderate soil loads and protects ferrous and nonferrous surfaces while drying uniformly, leaving an imperceivable thin film of corrosion protection that can provide up to 60 days protection on metal surfaces when handled properly in controlled applications. This product is excellent for any application that requires minimal residue after the final wash and vacuum drying applications.

QUAKERCLEAN® 680 VDA's unique chemical engineering resists foaming even at high pressures and has good oil splitting characteristics to extend bath life, reduce consumption and improve overall operating costs.

Customers

- Caterpillar
- Cummins
- Fiat Chrysler
- Automobiles
- General Motors
- John Deere
- Volvo

Fluid Maintenance

This product can be used in one- or multi-stage spray and immersion systems as defined below.

SPRAY EQUIPMENT	
Concentration	3-5% by Volume
Temperature	Ambient to 140°F
Contact Time	Dependent on soil condition of part

Benefits

- Versatile - Cleans mild to moderate soil loads and protects ferrous and nonferrous surfaces in one step simplifying operations and keeping inventory costs low
- Product can provide up to 60 days of corrosion protection to the metal surface when not rinsed, minimizes scrap which improves productivity
- Moderate pH and high worker compatibility
- Minimizes foam - No foam generation at temperatures up to 140°F in high pressure applications up to 3000 psi

Health, Safety and Handling

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Properties

PROPERTY	TYPICAL VALUE	UNIT
Appearance	Clear light yellow fluid	
Pounds per gallon at 60°F	8.9	lbs/gal
Neat pH	10.6	
Flash Point via COC	Boils at 100 / 212	°C/°F
Odor	Amine-like	



QUAKERCLEAN® 680 VDA

SPRAY AND PROCESS CLEANER

Seal Compatibility

As a result of the fluids alkaline properties, there may be incompatibilities with some machine components. Seals that are tolerant to higher pH's that exhibit good chemical resistance should be utilized, such as Buna N, Viton or Teflon. For specific compatibilities with seals, please review with your Quaker Houghton Representative.

Green Technology

QUAKERCLEAN® 680 VDA does not contain any strong acids, strong alkalis, nonylphenol ethoxylates (NPEs), solvents, ozone depleting compounds, silicates, phosphates or chelating agents. QUAKERCLEAN® 680 VDA has a mild operating pH and is nonflammable and non-combustible. Effective cleaning at ambient temperatures reduces energy costs.

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TECHNICAL DATA SHEET

QH EXOMAX™ 5378

ALKALINE SPRAY CLEANER

QH EXOMAX™ 5378 is a non-MEA, non-nitrited, low residue, alkaline spray cleaner with short-term in-plant rust protection. QH EXOMAX™ 5378 presents no barrier to subsequent coating. QH EXOMAX™ 5378 has proven to be an excellent alternative to the use of solvent emulsion cleaners.

Applications

QH EXOMAX™ 5378 is particularly effective in cleaning quench oils and splitting them out of solution. Effective in spray washers with high pressure nozzles with pressures of 40 psi to 250 psi. It may be used in all stages of multi-stage washers.

Recommendation For Use

QH EXOMAX™ 5378 is designed to be used as a spray cleaner at concentrations of 3% to 5% by volume, depending upon the soil being removed and the metal being processed. The operating temperature ranges from 70°F to 140°F.

Up to 1 week corrosion protection. QH EXOMAX™ 5378 has Honda approval.

Benefits

- Excellent corrosion protection and in-process rust protection on washed parts
- Cleanability and lower sediment/dirt counts in milligrams than typical organic cleaners
- Versatile- replaces both solvent emulsions and silicate cleaner

Health, Safety and Handling

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Typical Physical Properties

PROPERTY	TYPICAL VALUE	UNIT
Appearance	Clear to pale yellow liquid	
pH (2% solution)	10.2 ± 0.2	
Phosphates, Nitrates, MEA	None	
Solubility	Freely soluble in water	

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TECHNICAL DATA SHEET

QH EXOMAX™ P 2810

NON-PHOSPHATED IMMERSION METAL CLEANING COMPOUND

QH EXOMAX™ P 2810 is an alkaline liquid immersion cleaning compound. It contains a large amount of a detergent package designed to increase cleaning capabilities at lower temperatures.

Applications

QH EXOMAX™ P 2810 is designed to remove various soils on both ferrous and nonferrous metals.

Recommendation For Use

QH EXOMAX™ P 2810 is designed for use at ambient to 180°F.

Benefits

- Outstanding cleaning capability for optimal soil removal.
- May be used at ambient temperatures to dramatically reduce energy costs.
- Works on a wide variety of alloys which reduces costs via consolidation of products and purchases.
- Formulated with heat tolerant raw materials allowing for cleaning of even the most difficult soils.

Health, Safety and Handling

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Typical Physical Properties

PROPERTY	TYPICAL VALUE	UNIT
Appearance	Water white liquid	
pH (1% solution)	11.5	
Pounds per gallon	9.0	lbs / gal

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TECHNICAL DATA SHEET

QH EXOMAX™ F 1410 MAINTENANCE AND FLOOR CLEANER

QH EXOMAX™ F 1410 is a general maintenance and floor cleaner that provides excellent performance in a variety of general maintenance applications.

Applications

QH EXOMAX™ F 1410 can be used at the following concentrations:

Shop Floors/Driveways, Machines,
Powered Floor Scrubbers: 3-4%

Pressure Washers: 4-5%

Engines, Mop Bucket: 10%

Recommendation for Use

QH EXOMAX™ F 1410 must be mixed with water before use. Concentrations will vary based upon the type and amount of dirt to be removed and method of application.

Health, Safety and Handling

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Benefits

- Effectively removes a variety of soils such as machining fluids, grease, rubber tire marks, crayon to produce a suitable clean surface
- Works well for a variety of applications minimizing the need for a variety of products helping to reduce inventory and cost
- Outstanding cleaning capability for optimal soil removal
- NPE-free formula is environmentally friendly
- May be used at ambient temperatures to dramatically reduce energy costs
- Incorporates a balance of detergency and surfactancy to provide more effective cleaning

Properties

PROPERTY	TYPICAL VALUE	UNIT
Appearance	Blue	
Odor	Mild	
Density	8.7	lbs/gal
pH Neat	9.7	
pH 5% Solution	9.4	
Foam	Moderate	

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TECHNICAL DATA SHEET

QH EXOMAX™ B 1311

WATER-BASED MAINTENANCE CLEANER

QH EXOMAX™ B 1311 is a water-based maintenance cleaner formulated for superior cleaning.

Applications

The unique formulation contains hard-working surfactants to cut through oil, grease and dirt on floors, walls and shop machinery.

Recommendation for Use

QH EXOMAX™ B 1311 can be used in a wide range of industries including, Mining, Oil & Gas, Steel and Metalworking. It has a pleasant scent and low alkalinity which makes it less irritating when handling.

- Floor Scrubbers
- Machinery
- Tools
- General maintenance cleaning applications

Health, Safety and Handling

QH EXOMAX™ B 1311 can be used neat for some applications as described below, or added to water. All dilutions should be made in water and usage concentration should be determined based on soil conditions. Specific maintenance cleaning applications are detailed below.

PROPERTY	TYPICAL VALUE	UNIT
Floor Scrubbers	3-10	% by volume
Hand Mop Operations	5-20	% by volume
Soak Tank (Room Temp)	2-10	% by volume
Wipe On	1-100	% by volume

The Benefits

- Excellent Cleaning – Water-based maintenance cleaner with strong surfactant package that cuts through oil and grease in multiple cleaning applications
- Worker Compatibility – Mild soapy scent and neutral pH makes this cleaner less irritating and much safer to handle compared to other maintenance cleaners
- Environmentally Friendly – Non-hazardous product without silicates, phenols or glycol ether solvents
- Cost Effective – One products can replace many resulting in simplified ordering and reduced costs

Health, Safety and Handling

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Properties

PROPERTY	TYPICAL VALUE	UNIT
Appearance	Clear, Colorless	
Density at 60°F at 15.5°C	8.6 1.03	lbs/gal g/cm3
pH neat	7.7	
Boiling Point	100 212	°C °F
Odor	Mild soapy	

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