PILOT® CHEMICAL COMPANY

Leadership. Service. Flexibility. Success. **We're going further®.**

Household, Industrial & Institutional Product Catalog

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Charting Your Course with Innovative Chemical Solutions

Pilot's tailored solutions have spanned the globe for more than 70 years. A commitment to unique chemical processes and efficient manufacturing is our hallmark. Pilot's industry insight allows us to create surfactants designed to maximize your opportunities in new product development.

With strategically located facilities, we provide customized manufacturing solutions, and our expert team of technical specialists gives you rapid access to knowledgeable and reliable assistance at all stages of production. In addition, Pilot's well-established distributor network has built a record of consistent, on-time delivery.

Time after time, our custom programs succeed at delivering high yields. Pilot's leading-edge approach, personalized to each customer's needs, helps you achieve success.

We are a dynamic, market-focused and environmentally conscious company, offering the comprehensive chemical dexterity you expect from an industry leader. Whether you're producing detergents, personal care products, synthetic rubber, lubricants or other products, you can depend on Pilot to help lead you to success.

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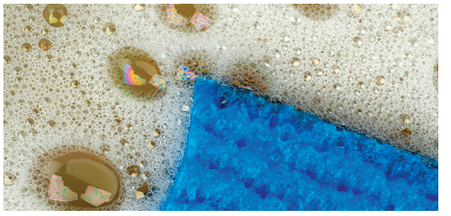

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Pilot's array of anionic, cationic, amphoteric, and nonionic products span a wide range of applications, including laundry and dish washing detergents, all-purpose cleaners, degreasers, disinfectants, vehicle-cleaning compounds, heavy-duty commercial and industrial cleaners and sanitizers. You can count on us to deliver exactly what you need, when you need it.

Alkyl Ether Sulfates	Calfoam® ammonium and sodium laureth sulfates are biodegradable anionic surfactants that have great cleansing properties with water hardness tolerance. They are excellent foamers with high flash foam and high viscosity response using amides, betaines and salts.			
Product	**Chemical Name**	**Physical Form/Activity**	**Features/Benefits**	**Application**
Calfoam® ES-301	Sodium Laureth Sulfate (1 Mole EO)	Liquid/26%	• Can replace sulfonates in most HI&I formulations. • Sodium laureth sulfates are compatible with high pH formulations. • Higher moles of EO increase mildness and flash foaming properties. • Calfoam® ES-302 HS has high viscosity and ES-302 HV has very high viscosity. • Calfoam® ES-603 contains ethanol solvent. • Calfoam® ES-702 and ES-703 offer cost savings over lower active products, but require special handling and storage capabilities.	Laundry, Dish Wash, Car Wash, other HI&I Cleaners
Calfoam® ES-302	Sodium Laureth Sulfate (2 Mole EO)	Liquid/27%		
Calfoam® ES-302 HS	Sodium Laureth Sulfate (2 Mole EO)	Liquid/27%		
Calfoam® ES-303	Sodium Laureth Sulfate (3 Mole EO)	Liquid/28%		
Calfoam® ES-562	Sodium Laureth Sulfate (2 Mole EO)	Liquid/55%		
Calfoam® ES-603	Sodium Laureth Sulfate (3 Mole EO)	Liquid/60%		
Calfoam® ES-702	Sodium Laureth Sulfate (2 Mole EO)	Liquid/70%		
Calfoam® ES-703	Sodium Laureth Sulfate (3 Mole EO)	Liquid/70%		
Calfoam® ALS-30	Ammonium Lauryl Sulfate	Liquid/30%	Calfoam® ALS-30 should be used with formulations having a pH of 7.0 or below.	Laundry, Hand Dish Wash, General Purpose Cleaner, Industrial Degreaser, Pot and Pan Cleaner, Car Wash Products, Carpet Cleaners

Alkyl Sulfates	Calfoam® lauryl sulfates are biodegradable anionic surfactants derived from renewable vegetable resources. They have excellent cleansing and foaming properties. They provide copious high flash foam capabilities, and excellent viscosity response with amides, betaines and salts.			
Product	**Chemical Name**	**Physical Form/Activity**	**Features/Benefits**	**Application**
Calfoam® TLS-40	TEA Lauryl Sulfate	Liquid/40%	Calfoam® TLS-40 offers higher activity and increased clarity at lower temperatures and builds excellent viscosity and detergency properties with other surfactants.	Laundry, Hand Dish Wash, General Purpose Cleaner, Industrial Degreaser, Pot And Pan Cleaner, Car Wash Products, Carpet Cleaners

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Alkanolamides	Pilot's Alkanolamides are biodegradable, naturally derived, 100% active 1:1 and 2:1 amides which provide foam boosting, foam stabilization and viscosity building properties. They also offer multiple lubrication and emulsification characteristics.			
Product	**Chemical Name**	**Physical Form/Activity**	**Features/Benefits**	**Application**
Calamide® C	Cocamide DEA	Liquid/100%	Calamide® C is a clear 1:1 super amide which is widely used in numerous HI&I formulations for building and stabilization of viscosity and foam.	Laundry, Hand Dish Wash, General Purpose Cleaner, Industrial Degreaser, Pot And Pan Cleaner, Car Wash Products, Carpet Cleaners
Calamide® CW-100	Cocamide DEA	Liquid/100%	Calamide® CW-100 is a 2:1 alkanolamide with a considerable amount of free alkali which increases solubility and detergency.	
Calamide® MC	Cocamide MEA	Flake/100%	Calamide® MC is a 1:1 super amide with some emollient and lubrication characteristics. Requires heat to bring product to a liquid state.	

Thickeners	DEA alternative viscosity building thickeners offering naturally derived, multi-functional performance in a wide range of cleaning applications			
Product	**Chemical Name**	**Physical Form/Activity**	**Features/Benefits**	**Application**
Masamide® REP	DEA Alternative - Surfactant Blend	Liquid/36%	Surfactant blend; characterized by very good wetting, dispersing, detergency, foaming, coupling, hydrotrope, and surface tension reduction properties for increased soil removal & emulsification; excellent solubility, viscosity & stability in alkaline & high electrolyte systems; used as a standalone surfactant or with amphoteric, nonionic, cationic & anionic surfactants.	Liquid Detergents, Household and Industrial Cleaners
Masamide® R-4	PEG-4 Rapeseedamide	Liquid/90%	Naturally plant derived PEG-4 rapeseedamide in water; unique thickening; uniquely natural compliment for use in products as a multi-functional replacement for Cocamide DEA while being Nitrosamine, allergen, and DEA alternative; Eco-friendly label with high biodegradability and low aquatic toxicity; mild surfactant; nonionic emulsifier, foam booster & stabilizer.	Household and Industrial Products

Sulfonates and Sulfonic Acids	Pilot's sulfonates produce economical formulations with superb cleansing, high foam volume, great flash foam and nice viscosity characteristics in a variety of HI&I applications. They are fully compatible with anionic, nonionic, and amphoteric surfactants.			
Product	**Chemical Name**	**Physical Form/Activity**	**Features/Benefits**	**Application**
Calsoft® AOS-1245	Sodium C12 Alpha Olefin Sulfonate	Liquid/45%	Calsoft® AOS-1245 offers excellent hard water and electrolyte stability, increased low temperature stability, excellent detergency, wetting, and hydrotroping in HI&I formulations.	Laundry, Hand Dish Wash, General Purpose Cleaner, Industrial Degreaser, Pot And Pan Cleaner, Car Wash Products, Carpet Cleaners
Calsoft® AOS-40	Sodium C14-16 Alpha Olefin Sulfonate	Liquid/40%	Calsoft® AOS-40 offers excellent detergency, wetting and foaming characteristics.	
Calsoft® AOS-FS	Sodium C14-16 Alpha Olefin Sulfonate	Liquid/43%	Calsoft® AOS-FS is specially designed for improved low temperature handling properties and increased hydrotroping and detergency. Also has a great freeze-thaw profile.	
Calsoft® F-90	Sodium Linear Alkyl Benzene Sulfonate	Flake/90%	Calsoft® F-90 is a high active low color sodium alkyl benzene sulfonate flake product used for wet and dry compounding of HI&I products. Perfect for ultra concentrated and high activity products.	Laundry, Dish Wash, All-Purpose Cleaner, Hard Surface Cleaner, Floor Cleaner, Dairy Cleaner, Wax Stripper, Degreaser, Car Wash
Calsoft® L-60	Sodium Linear Alkyl Benzene Sulfonate	Paste/60%	Calsoft® L-60 has excellent detergency and high-foaming properties. It contains a hydrotrope to aid in clarity.	
Calsoft® L-50 Slurry	Sodium Linear Alkyl Benzene Sulfonate Slurry	Slurry/50%	The Calsoft® L-50 Slurry sulfonate does not contain a hydrotrope, and therefore, has a lower clarity and higher viscosity.	Laundry, Dish Wash, All-Purpose Cleaner, Hard Surface Cleaner, Floor Cleaner, Dairy Cleaner, Wax Stripper, Degreaser, Car Wash
Calsoft® LAS-99	Linear Alkyl Benzene Sulfonic Acid	Liquid/97%	Calsoft® LAS-99 is a high 2-phenyl product that provides copious and stable foam with outstanding detergency, wetting, rinsability and grease cutting ability when neutralized with a suitable alkali.	
Calsoft® LPS-99	Linear Alkyl Benzene Sulfonic Acid	Liquid/97%	Calsoft® LPS-99 is a low 2-phenyl product with slightly lower water solubility than LAS-99 when neutralized with a suitable alkali.	
Calimulse® PRS	Isopropylamine Linear Alkyl Benzene Sulfonate	Liquid/93%	Calimulse® PRS offers great detergency, emulsification and oily and particulate soil removal characteristics. It is soluble in water and soluble or dispersible in organic solvents like ethyl/isopropyl alcohol, and mineral spirits. Produces crystal clear d'limonene microemulsions in water and is an excellent o/w emulsifier. Perfect for dry cleaning, 2X/3X laundry, and d'limonene cleaner products.	Laundry, Dish Wash, All-Purpose Cleaner, Hard Surface Cleaner, Floor Cleaner, Dairy Cleaner, Wax Stripper, Degreaser, D'limonene Microemulsions, Car Wash
Calsoft® P-85	Sodium Linear Alkyl Benzene Sulfonate	Flake/85%	Calsoft® P-85 is a high active sodium alkyl benzene sulfonate flake product with a lower solubility than Calsoft® F-90, perfect for HI&I applications requiring extended release detergency. Can be wet or dry compounded and has good anti-caking features.	Laundry, Dish Wash, All-Purpose Cleaner, Hard Surface Cleaner, Floor Cleaner, Dairy Cleaner, Wax Stripper, Degreaser, Car Wash
Calsoft® T-60	Triethanolamine Linear Alkyl Benzene Sulfonate	Liquid/60%	Calsoft® T-60 is a clear, odorless sulfonate with good detergency and excellent foam properties in soft and hard water environments, very stable with low temperature applications.	

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Sulfonates and Sulfonic Acids	Continued			
Product	**Chemical Name**	**Physical Form/Activity**	**Features/Benefits**	**Application**
Pilot® PTSA-65	p-Toluene Sulfonic Acid	Liquid/65%	Pilot® PTSA-65 is a high-quality clear toluene sulfonic acid with consistent performance.	Hand Dish Wash, Car Wash, Hard Surface Cleaner, Laundry, Institutional and Industrial Cleaners
Pilot® SXS-40	Sodium Xylene Sulfonate	Liquid/40%	Pilot® SXS-40 is a widely-used hydrotrope in many HI&I applications; effectively reducing viscosity, increasing solubility and improving clarity. It imparts dispersing and coupling properties in many formulations.	

Diphenyl Oxide Disulfonates and Disulfonic Acids	Pilot's Calfax® line offers both linear and super stable branched products, which are APEO, VOC ,and halogenated solvent alternatives and can find uses in a variety of applications.			
Product	**Chemical Name**	**Physical Form/Activity**	**Features/Benefits**	**Application**
Calfax® 10L-45	Sodium C10 Linear Diphenyl Oxide Disulfonate	Liquid/45%	• Multifunctionality – surfactant and hydrotrope in one. • Alkali, acid, electrolyte, bleach and peroxide stability • Non-streaking and spotting • Viscosity reducers • Thermal stability • Calfax® 10L-45 offers low streaking properties and solubilizes phenolic germicides in disinfectant formulations. It provides excellent rinsability and good coupling performance. • Calfax® 16L-35 offers outstanding detergency, emulsification characteristics and a very low CMC. • Calfax® DB-45 produces high foam and extremely stable emulsions in many HI&I applications. It provides great rinsability. • Calfax® 6LA-70 utilizes a low carbon chain which presents excellent hydrotroping properties and rinses easily from surfaces. • Calfax® DBA-70, when neutralized with alkali of choice, produces high foam and extremely stable emulsions in many HI&I formulations.	Glass Cleaner, Bath Cleaner, Kitchen Cleaner, Concrete Cleaner, Industrial And Institutional Laundry, Pot And Pan Cleaner, Car Wash, Floor Cleaner, Hard Surface Cleaner, Auto Dish Gel, Ultra and Compact Laundry Detergent
Calfax® 16L-35	Sodium C16 Linear Diphenyl Oxide Disulfonate	Liquid/35%		
Calfax® DB-45	Sodium C12 Branched Diphenyl Oxide Disulfonate	Liquid/45%		
Calfax® 6LA-70	C6 Linear Diphenyl Oxide Disulfonic Acid	Liquid/72%		Concentrated Home Laundry, Glass Cleaner, Bath Cleaner, Kitchen Cleaner, Concrete Cleaner, Industrial And Institutional Laundry, Pot And Pan Cleaner,Car Wash, Floor Cleaner, Hard Surface Cleaner, Auto Dish Gel
Calfax® DBA-70	C12 Branched Diphenyl Oxide Disulfonic Acid	Liquid/71%		

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Performance Concentrates	Calsuds® products are economical concentrates that require minimal additional ingredients to produce a desired cleaner/detergent formulation with excellent detergency and emulsification properties. These concentrates serve as bases for a wide variety of industrial and institutional applications. Pilot can custom-manufacture performance concentrates to meet your specifications.			
Product	**Chemical Name**	**Physical Form/Activity**	**Features/Benefits**	**Application**
Calsuds® 81	Proprietary Concentrated Detergent Blend	Liquid/60%	Calsuds® 81 is a completely balanced detergent base with excellent detergency, great grease cutting, emulsification, wetting, foaming, flash foam and handling properties.	Heavy Duty Cleaner, Pot And Pan Cleaner, Laundry, Hard Surface Cleaner, Car Wash, Dish Wash Formulations, All Purpose Cleaner
Calsuds® A	Proprietary Concentrated Detergent Blend	Liquid/50%	Calsuds® A is an anionic and nonionic surfactant concentrate which can be used "as is" or compounded with other ingredients. Imparts excellent detergency, oily and particulate soil removal, grease cutting and foaming characteristics.	Manual Dish Wash, General Purpose Cleaners, Car Wash Products, Tub/Tile Cleaner, Laundry
Calsuds® CD-6	Proprietary Modified Coconut Diethanolamide	Liquid/100%	Calsuds® CD-6 is a 100% active, high-alkalinity base with excellent emulsifying, viscosity-building, detergency and foam-stabilizing properties. It is ideal for high-viscosity and economical formulations.	Waterless Hand Cleaner, Laundry Detergent, Manual Dish Wash, Car Wash, Degreasers

Performance Blends	CalBlend® products are pre-formulated performance blends. Simply mix with water to the preferred active level, then add preservative, fragrance, and dye to obtain a finished product ready for packaging. These products offer formulators convenience and reduction of production errors and inventory.			
Product	**Chemical Name**	**Physical Form/Activity**	**Features/Benefits**	**Application**
CalBlend® DF	Sodium Laureth Sulfate, Sodium Lauryl Sulfate, Cocamidopropyl Betaine, Cocamide MIPA	Liquid/30%	DEA alternative blend that produces formulations which easily build viscosity levels, while yielding premium instant flash foam. CalBlend® DF is environmentally friendly, VOC alternative, and solvent alternative	Liquid Dish Detergents and Laundry Detergents
CalBlend® ECO-1	Sodium Lauryl Sulfate, Sodium Laureth Sulfate, Cocamide MEA, Cocamidopropyl Betaine	Liquid/35%	Environmentally and economical friendly performance blend that is biodegradable. Offers excellent cleansing, viscosity, flash foam, luxurious lather and skin mildness characteristics.	Mild HI&I Cleaners, Liquid Dish Detergents, Laundry Detergents
CalBlend® Mild	Sodium Laureth Sulfate, PEG-80 Sorbitan Laurate, Lauramidopropyl Betaine, PEG-150 Distearate	Liquid/30%	Ultra-mild optimized blend of gentle foaming and cleansing agents with excellent viscosity characteristics, contains no solvents, is naturally derived, DEA alternative, and VOC alternative	Mild Dish Wash & Laundry Detergents for Sensitive Skin and Baby Product Use
CalBlend® PC	Sodium C14-16 Olefin Sulfonate, Cocamidopropyl Betaine, Cocamide MIPA	Liquid/30%	Dioxane alternative, DEA alternative performance blend that offers excellent viscosity building to produce a creamy lather and soft afterfeel.	Shampoo, body wash, liquid hand soap, pet shampoo, liquid dish and laundry detergents
CalBlend® PSX	Sodium Laureth Sulfate, Sodium Lauryl Sulfate, Glycol Stearate, Cocamidopropyl Betaine, Cocamide MIPA, PEG-46M	Liquid/30%	DEA alternative, solvent alternative, and VOC alternative concentrated blend of surfactants specially formulated to produce rich lathering pearlescent personal care products.	Shampoo, body wash, hand soap, pet shampoo

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UV Protectants	Ultraviolet light absorbers for use in a range of surface cleaning and protection formulations.			
Product	**Chemical Name**	**Physical Form/Activity**	**Features/Benefits**	**Application**
Masurf® UV-150	Benzotriazole Based Products UV Absorber for Textiles and Hard Surfaces	Liquid/55%	Self-emulsible Ultraviolet Light Absorbers for aqueous systems, designed to impart UV protection to fabrics and hard surfaces; utilizing proven benzotriazole UV chemistry with Mason StayClean™ advanced microemulsion technology, the product is easy to use and highly efficient; readily micro-emulsible in cold water with minimal stirring, creating very stable, clear, small particle size (<50nm) microemulsion for uniform dispersion and coverage; use UV-150 in nonionic, anionic, amphoteric and weakly cationic systems; Non-Flammable; does not contain or release ozone depleting chlorofluorocarbons (CFC's), alkylphenol ethoxylates (APE's), and does not release formaldehyde.	Carpet Shampoos, Extraction Cleaners and Spotters, Upholstery Shampoos, Steam Cleaners and Treatments, Apparel Finishes and Treatments

Polymers	Pilot's functionalized polymers are designed to impart soil resistance, cleaning, and surface protection in a variety of applications			
Product	**Chemical Name**	**Physical Form/Activity**	**Features/Benefits**	**Application**
Masurf® SP-535A	Anionic Polymers StayClean™ Anti-Soiling Agents	Liquid/40%	Functionalized anionic polymers designed to impart soil resistance, anti-soil redeposition, soil release and stain blocking properties to carpet & upholstery cleaner formulations. Treated surfaces repel dry soil, and resist stains. Use Masurf® SP-535, SP-535A to impart superior dry soil resistance with soil release. Masurf® SP-535 and SP-535A are Nonflammable, and do not contain or release ozone depleting chlorofluorocarbons (CFC's), alkylphenol ethoxylates (APE's), and/or formaldehyde.	Carpet Shampoos, Extraction Cleaners and Spotters,Upholstery Shampoos and Steam Cleaners.
Masurf® SP-925	Anionic Polymers StayClean™ Hard Surface Protector	Liquid/25%	Functionalized "smart" polymer designed to impart cleaning with surface protectant and soil resistance and release properties to treated surfaces, optimized for Surface Protection of bathroom, shower and related surfaces subject to soap-film and similar soils; effective over the pH range <1 to 14; when used on hard surfaces such as glazed ceramic tile, shower doors, plastic, chrome, fiberglass, glazed porcelain, synthetic marble, painted surfaces, polished stone & glass, it will create an "invisible barrier" that repels soils and protects against build-up; used to also create highly hydrophilic surfaces that sheet water.	Household Products, Bathroom Cleaning, Anti-Fog Glass Cleaners and Spotless Car Wash Detergents

Cationic Surfactants	Available in a wide range of activity levels, Pilot's cationic surfactants find use in a variety of cleaning applications.			
Product	**Chemical Name**	**Physical Form/Activity**	**Features/Benefits**	**Application**
Maquat® FD-2003	Granular Floor Deodorizer	Solid Granular/100%	Manufactured from a special low dust process, ideal for broadcast application, easy to identify the light blue/green color as non-food ingredient for use in USDA inspected facilities, granules crush easily to release odor control ingredients and readily rinse cleanly into floor drains.	TSCA/CDSL listed granular cationic surfactant/urea floor deodorizer & treatment. Use in Meat, poultry, dairy & food processing establishments; effective odor control agent in moist environments. Wherever odor control can be a problem - commercial kitchens, trash & dumpster areas, loading docks & other food handling areas.
Maquat® C-2	Coco bis (2-hydroxyethyl) Methylammonium Chloride	Liquid/75%	Naturally plant derived coco bis (2-hydroxyethyl)methylammonium chloride in 2-propanol, or No-Flash propylene glycol, unique anti-static, dispersing, solubilizing and foaming properties used in many products.	Degreasers, Pine Oil and d-Limonene Cleaners, Vehicle Cleaners, Sanitation Products, Electroplating Bath Formulations, Textile Anti Stats, Water Based Degreasers, Household Cleaners
Maquat® C-15	Cocoalkylmethyl PEG-15 Ammonium Chloride	Liquid/95%	Naturally plant derived cocoalkylmethyl PEG-15 ammonium chloride, unique anti-static, dispersing, hydrotrope, solubilizing and foaming properties used in many products.	Degreasers, Pine Oil and d-Limonene Cleaners, Vehicle Cleaners, Corrosion Inhibitors, Electroplating Bath Formulations, Textile Anti Stats, Water Based Degreasers, Household Cleaners
Maquat® QSX -105 S	Stabilized Organosilane Quaternary Ammonium Compound	Liquid/5%	3-(trihydroxysilyl) propyldimethyl octadecyl ammonium chloride in a stabilized or aqueous dilution, for durable mold & mildew resistant finishing on textiles & related surfaces; effective protection of treated surfaces against odor, staining & discoloration associated with bacteria, fungi (mold & mildew) and algae.	Paper Production and Wood Treatment
Mason® CS 24M / CS 15M	"Fifth Generation" Quaternary Ammonium Blend	Liquid/50% Liquid/80%	TSCA/CDSL listed 80% and 50% active, naturally plant derived dialkyldimethyl ammonium chlorides and alkyldimethylbenzyl ammonium chlorides in a water/ethanol solution, for use in non-EPA/ Canadian registered biocide applications; non-registered version of Maquat® MQ-624M and MQ-615M; cationic surfactants have a multitude of uses: anti-foam, emulsifier, anti-stat, scour; the high purity of the starting material delivers a consistent, low color and odor, high performance product that can be differentiated into consistent, high value end-use products.	Carpet Extraction Cleaners, Degreasers, Pine Oil and d-Limonene Cleaners, Vehicle Cleaners, and Sanitation Products
Mason® CS-445 / CS-448	Didecyldimethyl Ammonium Chloride	Liquid/50% Liquid/80%	Naturally plant derived didecyldimethyl ammonium chloride for use as cationic surfactants in a wide range of applications: anti-foam, emulsifier, anti-stat, scour, corrosion inhibitors & clay stabilizers; characteristically low in color, low in odor and reliably consistent batch to batch; useful in increasing the cloud point of cationic/nonionic cleaning formulations while enhancing oil/lipid solubilizing performance; this product was made from a Palm Kernel oil source with greater than 90% biorenewable Carbon; the high purity of the starting material delivers a consistent, low color and odor, high performance product that can be differentiated into consistent, high value end-use products.	Carpet Extraction Cleaners, Degreasers, Pine Oil and d-Limonene Cleaners, Vehicle Cleaners, and Sanitation Products

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Cationic Surfactants	Continued			
Product	**Chemical Name**	**Physical Form/Activity**	**Features/Benefits**	**Application**
Mason® CS-125	Alkyldimethylbenzyl Ammonium Chloride	Liquid/50%	Alkyldimethylbenzyl ammonium chloride in a water solution, with an alkyl distribution of C12 67%, C14 25%, C16 7%, C18 1%, for use in non-EPA/Canadian registered applications; cationic surfactants and a multitude of uses.	Carpet Extraction Cleaners, Degreasers, Pine Oil and d-Limonene Cleaners, Vehicle Cleaners, and Sanitation Products
Mason® CS-425	Alkyldimethylbenzyl Ammonium Chloride	Liquid/50%	Alkyldimethylbenzyl ammonium chloride in a water solution, with an alkyl distribution of C12 40%, C14 50%, C16 10%, for use in non-EPA/Canadian registered applications; cationic surfactants have a multitude of uses.	Carpet Extraction Cleaners, Degreasers, Pine Oil and d-Limonene Cleaners, Vehicle Cleaners, and Sanitation Products
Mason® CS-428		Liquid/80%	Naturally plant derived alkyldimethylbenzyl ammonium chloride in a water/ethanol, or No-Flash water/ethylene glycol solution with an alkyl distribution of C14 50%, C12 40%, C16 10%, for use in non-EPA/Canadian registered applications; cationic surfactants have a multitude of uses: anti-foam, emulsifier, scour.	
Mason® CS-428EG		Liquid/80%		
Mason® CS EBC50/EBC80	Cationic Surfactant Blend	Liquid 50%/ Liquid 80%	Both contain a 50:50 blend of alkyl dimethyl benzyl ammonium chloride with an alkyl distribution of C14 50%, C12 40%, C16 10%, and alkyl dimethyl ethyl benzyl ammonium chloride with an alkyl distribution of C12 68%, C14 32%; EBC-50% contains no solvent; EBC-80% is in a water/ethanol solution; both are for use in non-EPA/Canadian registered applications; cationic surfactants provide positive deodorant action (not as a masking agent but as a chemical destroyer of noxious odors arising from non-organic sources as well as putrefactive processes); non-volatile, unaffected by freezing or high temperatures; no long term storage problems; easy to formulate into multi-purpose, one-step products to provide powerful cleaning and deodorizing action; not affected by pH or flammable solvents.	Cleaners and Deodorizers
Amine Oxides	Offering a wide range of naturally derived Amine Oxides that produce a mild, creamy lather, while providing excellent foam boosting and stabilizing characteristics as well as Bleach, Peroxide, Acid, and Alkali Stability			
Product	**Chemical Name**	**Physical Form/Activity**	**Features/Benefits**	**Application**
Caloxamine® CPO	Cocamidopropylamine Oxide	Liquid/32%	Fully compatible with anionic, nonionic and amphoteric surfactants. It is bleach and peroxide stable, compatible with biocidal quats and provides excellent foam stability, copious foam, foam-boosting and mildness properties. It also offers tremendous emulsification and great viscosity-building characteristics.	Kitchen And Bath Cleaners, Laundry Detergents, Car Wash, Hand Dish Wash Detergent, Drain Cleaners, Carpet Shampoo, HI&I Cleaners
Caloxamine® LO	Lauramine Oxide	Liquid/30%	Provides outstanding foam volume, good foam stabilization, foam-boosting and grease cutting properties and offers great emulsification and viscosity-building characteristics.	Kitchen And Bath Cleaners, Laundry Detergents, Car Wash, Hand Dish Wash Detergent, Drain Cleaners, Carpet Shampoo, HI&I Cleaners

Amine Oxides	Offering a wide range of naturally derived Amine Oxides that produce a mild, creamy lather, while providing excellent foam boosting and stabilizing characteristics as well as Bleach, Peroxide, Acid, and Alkali Stability			
Product	**Chemical Name**	**Physical Form/Activity**	**Features/Benefits**	**Application**
Macat® AO-8	Octyl Dimethylamine Oxide	Liquid/30% or Liquid/40%	Naturally plant derived octyl (C8) dimethylamine oxide in water, effective low foam wetting and coupling agent that is hypochlorite and acid stable, broad surfactant compatibility, exhibits enhanced surface activity for use in acidic floor and bathroom cleaners. **CleanGredients® Listed.**	HI&I Cleaners, Textile Finishing, Bleach and Peroxy Cleaners, Floor Cleaners, Dairy Cleaners, Food Processing Cleaners, Bathroom Cleaners
Macat® AO-8-Special	Low Foam version of AO-8 Bleach Stable Surfactant	Liquid/30%	Naturally plant derived octyl (C8) dimethylamine oxide in water, exceptional low foam wetting and coupling agent that is hypochlorite and alkali stable, broad surfactant compatibility, use in high activity bleaching systems for enhanced cleaning, protein removal & the elimination of mold & mildew stains, readily biodegradable, contains no solvents or VOC's, efficient lipid solubilizer.	Household Products, Institutional Clean-In-Place Cleaners, Commercial Water Treatment, Bleach and Peroxy Cleaners, Floor Cleaners, Dairy Cleaners, Food Processing Cleaners, Bathroom Cleaners
Macat® AO-10	Decyl Dimethylamine Oxide	Liquid/30%	Naturally plant derived decyl (C10) dimethylamine oxide in water, effective wetting agent, outstanding grease cutter that is hypochlorite and acid and alkali stable, exhibits enhanced surfactant activity for use in acidic floor and bathroom cleaners, non-rewetting above 350 degrees Fahrenheit, useful as a foaming agent in brine solutions. **CleanGredients® Listed.**	Dish wash Detergents, HI&I Cleaners, Textile Finishing, Oil Field Applications, Bleach and Peroxy Cleaners, Floor Cleaners, Dairy Cleaners, Food Processing Cleaners, Bathroom Cleaners
Macat® AO-12	Alkyl Dimethylamine Oxide	Liquid/30%	30% Active lauryl (C12) dimethylamine oxide in water, effective wetting agent, outstanding foam booster and grease cutter that is hypochlorite and acid and alkali stable, enhanced surface activity for use in acidic floor and bathroom. **CleanGredients® Listed.**	Dish wash Detergents, HI&I Cleaners, Bleach and Peroxy Cleaners, Floor Cleaners, Dairy Cleaners, Food Processing Cleaners, Bathroom Cleaners
Macat® AO-12-2	Dihydroxyethyl Cocamine Oxide	Liquid/30%	30% Active dihaydroxyethyl cocamine oxide in water, provides viscosity control, outstanding foam booster and foam stabilizer. **CleanGredients® Listed.**	Dish wash Detergents, HI&I Cleaners, Bleach and Peroxy Cleaners, Floor Cleaners, Dairy Cleaners, Food Processing Cleaners, Bathroom Cleaners
Macat® AO-18:1	Oleamine Oxide	Liquid/30%	Naturally oleyl (C18.1) dimethylamine oxide in water, dilutes to high viscosity aqueous solutions, outstanding foam booster and grease cutter that is chlorine and acid stable, biodegradable and contains no solvents or VOC's.	HI&I Cleaners, Drain Openers and Cleaners, Hypochlorite Formulations, Bleach and Peroxy Cleaners, Floor Cleaners, Dairy Cleaners, Food Processing Cleaners, Bathroom Cleaners

Household, Industrial, & Institutional

Amine Oxides	Continued			
Product	**Chemical Name**	**Physical Form/Activity**	**Features/Benefits**	**Application**
Macat® MCO	Myristyl/Cetyl Dimethylamine Oxide	Liquid/30%	Naturally plant derived myristyl/cetyl (C14/16) dimenthylamine oxide in water, provides viscosity control, outstanding foam booster and grease cutter that is chlorine and acid stable. Available as 20% active Macat® MCO-20.	Dishwasher Detergents, HI&I Cleaners, Drain Openers and Cleaners, Bleach and Peroxy Cleaners, Floor Cleaners, Dairy Cleaners, Food Processing Cleaners, Bathroom Cleaners
Macat® Ultra LMDO	Lauramidopropylamine Oxide	Liquid/30%	Naturally plant derived lauryl (C12) amidopropyl dimethylamine oxide in water, effective wetting agent, outstanding foam booster, grease cutter and low pH thickener. Low Free Peroxide version available.	Dish wash Detergents, HI&I Cleaners, Bleach and Peroxy Cleaners, Floor Cleaners, Dairy Cleaners, Food Processing Cleaners, Bathroom Cleaners, and Low Free Peroxide Version Available
Macat® Ultra CDO	Cocamidopropylamine Oxide	Liquid/30%	Naturally plant derived coco (C12) amidopropyl dimethylamine oxide in water, effective wetting agent, outstanding foam booster, grease cutter and low pH thickener. Low Free Peroxide version available. **CleanGredients® Listed.**	

Betaines	Biodegradable viscosity building thickeners offering mildness and foam boosting and stabilizing characteristics, available in various alkyl chains and active levels, and compatible with a wide range of primary surfactants.			
Product	**Chemical Name**	**Physical Form/Activity**	**Features/Benefits**	**Application**
Macat® LB	Lauryl Alkyl Betaines	Liquid/34%	Naturally plant derived lauryl (C12), cetyl (C16) or lauryl/cetyl (C12/16) dimethyl betaines in water, classic zwitterion surfactants with good detergency and coupling performance, with exceptional mildness to skin, biodegradable and contains no solvents or VOC's, exhibiting very low toxicity.	Liquid Laundry Detergent, Hand Dish Wash, Multi-Purpose Cleaner, Floor Cleaner, HI&I Cleaners
Macat® LCB	Lauryl/ Cetyl Alkyl Betaines	Liquid/30%		
Macat® LFB	Capryl/Capramidopropyl Betaine	Liquid/30%	Naturally plant derived caprylic/capric (C8/10) amidopropyl betaine in water, classic zwitterion surfactant with good detergency and coupling performance, with exceptional mildness to skin, biodegradable, contains no solvents or VOC's, exhibits very low toxicity.	Liquid Laundry Detergent, Hand Dish Wash, Multi-Purpose Cleaner, Floor Cleaner, HI&I Cleaners
Macat® Ultra CG	Cocamidopropyl Betaine	Liquid/30%	Naturally plant derived coco (C12-16) amidopropyl betaine in water, classic zwitterion surfactant, used as an exceptionally mild cleansing agent, skin conditioner, foam booster and thickener, biodegradable, contains no solvents or VOC's, exhibits very low toxicity.	Liquid Laundry Detergent, Hand Dish Wash, Multi-Purpose Cleaner, Floor Cleaner, HI&I Cleaners

Betaines	Continued			
Product	**Chemical Name**	**Physical Form/Activity**	**Features/Benefits**	**Application**
Caltaine® C-35	Cocamidopropyl Betaine	Liquid/30%	Mild, viscosity-building and foam-boosting agent with great detergency properties. It is fully compatible with anionic, nonionic and amphoteric surfactants and provides outstanding foam intensity, foam stabilization and viscosity-building properties.	Liquid Laundry Detergent, Manual Dish Wash, Multi-Purpose Cleaner, Floor Cleaner, HI&I Cleaners
Macat® LHS	Lauryl Hydroxysultaine	Liquid/42%	Naturally plant derived lauryl (C12) hydroxysultaine in water, effective wetting and detergency, outstanding foam stabilizer, stable in strongly acid and alkaline systems, biodegradable, contains no solvents or VOC's, exhibits very low toxicity.	Liquid Laundry Detergent, Manual Dish Wash, Multi-Purpose Cleaner, Floor Cleaner, HI&I Cleaners
Macat® CAP-HS	Cocamidopropyl Hydroxysultaine	Liquid/50%	Naturally plant derived coco (C12-16) amidopropyl hydroxysultaine in water, effective wetting and detergency, outstanding foam stabilizer, stable in strongly acid and alkaline systems, biodegradable, contains no solvents or VOC's, very mild ingredient, exhibiting very low toxicity.	Liquid Laundry Detergent, Manual Dish Wash, Multi-Purpose Cleaner, Floor Cleaner, HI&I Cleaners

Specialty Products	Pilot specialty products are designed to enhance a variety of cleaning formulations, and come in a range of active levels.			
Product	**Chemical Name**	**Physical Form/Activity**	**Features/Benefits**	**Application**
Calinate® LE	Disodium Laureth Sulfosuccinate	Liquid/40%	Very mild and high-foaming anionic surfactant with excellent wetting characteristics. Produces sulfate alternative formulations with good foam properties and viscosity response to amides, betaines and salts.	Laundry Detergents, Mild Dish Wash Detergents, Hard Surface Cleaners
Macat® DOSS-70PG S	Sodium Dioctyl Sulfosuccinate	Liquid/70%	Di-2-ethylhexyl sodium sulfosuccinate in water and propylene glycol, compatibility in a wide range of solvent systems for use as a versatile wetting, dispersing, emulsifying and detergent ingredients, readily biodegradable, listed on the EPA Inert ingredient list 4B as a Minimal Risk Material.	Cleaning Formulations
Macat® DOSS-75E	Sodium Dioctyl Sulfosuccinate	Liquid/75%	Di-2-ethylhexyl sodium sulfosuccinate in water and ethanol, broad FDA Status, compatibility in a wide range of solvent systems for use as a versatile wetting, dispersing, emulsifying and detergent ingredients, readily biodegradable, complying with decree on surfactant biodegradability of the European Community, listed on the EPA Inert ingredient list 4B as a Minimal Risk Material.	Cleaning Formulations and HI&I
Macat® DOSS-70MSO	Sodium Dioctyl Sulfosuccinate	Liquid/70%	Di-2-ethylhexyl sodium sulfosuccinate in Mineral seal oil, broad FDA Status, compatibility in a wide range of solvent systems for use as a versatile wetting, dispersing, emulsifying and detergent ingredients, readily biodegradable, complying with decree on surfactant biodegradability of the European Community, listed on the EPA Inert ingredient list 4B as a Minimal Risk Material.	Cleaning Formulations

Household, Industrial, & Institutional

Specialty Products	Continued			
Product	**Chemical Name**	**Physical Form/Activity**	**Features/Benefits**	**Application**
Masurf® NF-10	High Alkaline Stable Low Foam Surfactant	Liquid/50%	Highly efficient, high alkaline stable surfactant that delivers exceptional low foam detergency, unique detergent system that features high alkaline hydrotrope properties of an anionic with low foam cloud point performance of a nonionic, recommended for all applications where efficient low foam detergency is critical, including Spray, Soak, In-Line and other Clean-In-Place systems, non-flammable, non-VOC, low foaming, alkaline stable and water soluble.	Automatic Dishwashing Liquid and Low Foam Cleaner Concentrate
Masurf® NF-25	High Alkaline Stable Low Foam Surfactant	Liquid/50%	Highly efficient, high alkaline stable surfactant that delivers exceptional low foam detergency, unique detergent system that features high alkaline hydrotrope properties of an anionic with low foam cloud point performance of a nonionic, recommended for all applications where efficient low foam detergency is critical, including Spray, Soak, In-Line and other Clean-In-Place systems, non-flammable, non-VOC, low foaming, alkaline stable and water soluble.	Low Foam Cleaner Concentrate and Bottle Wash Concentrate
Masoteric™ 160C-30	Sodium Lauriminodipropionate	Liquid/30%	Sodium lauriminodipropionate surfactant in water, salt-free, multifunctional amphoteric surfactant characterized by acid/alkali stability, detergency, and ability to couple nonionic surfactants into strong electrolyte solutions, detergency, solubilizing and emulsification properties with compatibility in nonionic, anionic and cationic surfactant solutions.	Liquid Detergents, Household and Industrial Cleaners
Masoteric™ C-2SF	Disodium Cocoamphodipropionate	Liquid/38%	Disodium coco imadozoline dicaboxylate surfactant in water, salt-free, multi-functional amphoteric surfactant characterized by acid/alkali stability, detergency, and ability to couple nonionic surfactants into strong electrolyte solutions, listed in 2007 CIR Compendium as safe for use as a cosmetic ingredient & mild enough for use in Baby Shampoo, ability to mitigate irritation of surfactants, detergency, solubilizing and emulsification properties with compatibility in nonionic, anionic and cationic surfactant solutions.	Liquid Detergents, Household and Industrial Cleaners and Electroplating
Macat® AEC-8964	Capryleth-9 Carboxylic Acid & Hexeth-4 Carboxylic Acid	Liquid/87%	Naturally plant derived mixed alcohol ether carboxylate surfactant blend, shipped as the free acid, for neutralization into a range of products & applications, tailored as a function of pH, under acidic conditions functions as a nonionic, under alkaline conditions functions as a hard water tolerant anionic, biodegradable, non-VOC and easy to handle.	All applications where low foam, wetting, alkaline stability and hypochlorite stability is critical. Use in low foaming anionic systems for detergency and oil solubilization. Take advantage of the hypochlorite stabiliteyin CIP formulations & specialty cleaners, Automatic Dishwashing Liquid

Alcohol Ethoxylates	Nonionic surfactants characterized by high surface activity, and rapid biodegradability, to readily enhance cleaning formulations.			
Product	**Chemical Name**	**Physical Form/Activity**	**Features/Benefits**	**Application**
Masodol® 1-3	Alcohol Ethoxylates	Liquid/100%	Narrow-range linear primary alcohol ethoxylate nonionic surfactant characterized by high surface activity, rapid biodegradability and low aquatic toxicity; unique degreasing, wetting, dispersing, detergent and oil solubilizing properties; unique multifunctional surfactant for use in wide range of products & applications; exceptionally rapid penetration of soils for improved cleaning performance on hard surfaces. **CleanGredients® Listed.**	Paints & Coatings, Water Based Degreasers, Laundry & Textile Wetting, Spray Dried Detergents, Deinking, Vehicle & Household Hard Surface Cleaners
Masodol® 1-7	Alcohol Ethoxylates	Liquid/100%	Narrow-range linear primary alcohol ethoxylate nonionic surfactant characterized by high surface activity, rapid biodegradability and low aquatic toxicity; unique degreasing, wetting, dispersing, detergent and oil solubilizing properties; unique multifunctional surfactant for use in wide range of products & applications **CleanGredients® Listed.**	Degreasers, Pine Oil and d-Limonene Cleaners, Laundry Detergents, Vehicle Cleaners, Paintings & Coatings, Water Based Degreasers, Laundry & Textile Wetting, Spray Dried Detergents, Deinking, Vehicle & Household Hard Surface Cleaners
Masodol® 25-7	Alcohol Ethoxylates	Liquid/100%	Linear primary alcohol ethoxylate nonionic surfactant characterized by high surface activity, rapid biodegradability and low aquatic toxicity; unique degreasing, wetting, dispersing, detergent & oil solubilizing properties; unique multifunctional surfactant for use in wide range of products & applications; standalone surfactant or with amphoteric, cationic, and anionic surfactants; **CleanGredients® Listed.**	Degreasers, Pine Oil and d-Limonene Cleaners, Liquid Laundry, Floor Cleaners and Strippers, Paintings & Coatings, Water Based Degreasers, Laundry & Textile Wetting, Spray Dried Detergents, Deinking, Vehicle & Household Hard Surface Cleaners
Masodol® 25-9	Alcohol Ethoxylates	Liquid/100%	Linear primary alcohol ethoxylate nonionic surfactant characterized by high surface activity, rapid biodegradability and low aquatic toxicity; unique degreasing, wetting, dispersing, detergent & oil solubilizing properties; unique multifunctional surfactant for use in wide range of products & applications; standalone surfactant or with amphoteric, cationic, and anionic surfactants; **CleanGredients® Listed.**	Degreasers, Pine Oil and d-Limonene Cleaners, Liquid Laundry, Floor Cleaners and Strippers, Paints & Coatings, Water Based Degreasers, Laundry & Textile Wetting, Spray Dried Detergents, Deinking, Vehicle & Household Hard Surface Cleaners
Masodol® 900	Alcohol Ethoxylates	Liquid/95%	Linear primary alcohol ethoxylate nonionic surfactant characterized by high surface activity, rapid biodegradability and low aquatic toxicity; unique degreasing, wetting, dispersing, detergent & oil solubilizing properties; unique multifunctional surfactant for use in wide range of products & applications; standalone surfactant or with amphoteric, cationic, and anionic surfactants; **CleanGredients® Listed.**	Degreasers, Pine Oil and d-Limonene Cleaners, Liquid Laundry, Floor Cleaners and Strippers, Paints & Coatings, Water Based Degreasers, Laundry & Textile Wetting, Spray Dried Detergents, Deinking, Vehicle & Household Hard Surface Cleaners

Household, Industrial, & Institutional

Alcohol Ethoxylates	Continued			
Product	**Chemical Name**	**Physical Form/Activity**	**Features/Benefits**	**Application**
Masodol® 91-2.5	Alcohol Ethoxylates	Liquid/100%	Low HLB linear primary alcohol ethoxylate nonionic surfactant characterized by high surface activity, rapid biodegradability and low aquatic toxicity; unique degreasing, wetting, dispersing, detergent and oil solubilizing properties; unique multifunctional surfactant for use in wide range of products and applications; exceptionally rapid penetration of soils for improved cleaning performance on hard surfaces; use with other nonionic surfactants or with amphoteric, cationic, and anionic surfactants; grease cutting emulsifier.	Degreasers, Pine Oil and d-Limonene Cleaners, Vehicle Cleaners, Paints & Coatings, Water Based Degreasers, Laundry & Textile Wetting, Spray Dried Detergents, Deinking, Vehicle & Household Hard Surface Cleaners
Masodol® 91-6	Alcohol Ethoxylates	Liquid/100%	Linear primary alcohol ethoxylate nonionic surfactant characterized by high surface activity, rapid biodegradability and low aquatic toxicity; unique degreasing, wetting, dispersing, detergent & oil solubilizing properties; unique multifunctional surfactant for use in wide range of products & applications; exceptionally rapid penetration of soils for improved cleaning performance on hard surfaces; use as a standalone surfactant or with amphoteric, cationic, and anionic surfactants; **CleanGredients® Listed.**	Degreasers, Pine Oil and d-Limonene Cleaners, Vehicle Cleaners, Paints & Coatings, Water Based Degreasers, Laundry & Textile Wetting, Spray Dried Detergents, Deinking, Vehicle & Household Hard Surface Cleaners
Masodol® 91-8	Alcohol Ethoxylates	Liquid/100%	Linear primary alcohol ethoxylate nonionic surfactant characterized by high surface activity, rapid biodegradability and low aquatic toxicity; unique degreasing, wetting, dispersing, detergent & oil solubilizing properties; unique multifunctional surfactant for use in wide range of products & applications; exceptionally rapid penetration of soils for improved cleaning performance on hard surfaces; use as a standalone surfactant or with amphoteric, cationic, and anionic surfactants; **CleanGredients® Listed.**	Degreasers, Pine Oil and d-Limonene Cleaners, Vehicle Cleaners, Paints & Coatings, Water Based Degreasers, Laundry & Textile Wetting, Spray Dried Detergents, Deinking, Vehicle & Household Hard Surface Cleaners

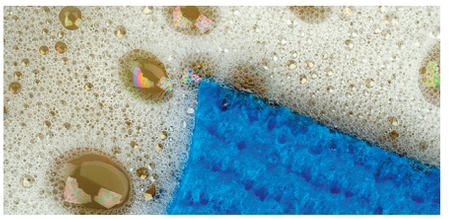
Neutral Disinfectants

EPA Reg. No.	Product Name	Active Ingredient	% Active	Dilution Ounces per Gallon			Notes
				Hospital Disinfectant	General Disinfectant	Sanitizer	
10324-114	Maquat® 32 MN	MQ615M/624M	2.713	4.0	4.0	4.0	Disinfectant/ Non-Food Contact Sanitizer/ Athletic Surface Disinfectant/ Non-Dulling to Floors/ Extensive Hospital Claims/ Small Fly Ovicidal/ Avian Influenza/ HIV, HBV, HCV/ Resistant Strains
10324-113	Maquat® 64 MN	MQ615M/624M	5.426	2.0	2.0	2.0	
10324-112	Maquat® 128 MN	MQ615M/624M	10.85	1.0	1.0	1.0	
10324-108	Maquat® 256 MN	MQ615M/624M	21.7	0.5	0.5	0.5	
10324-157	Maquat® 32-NHQ	2420-50%/80%	2.113	4.0	4.0	4.0	Disinfectant/ Cleaner/ Non-Food Contact Sanitizer/ Athletic Surface Disinfectant/ Non-Dulling to Floors/ Extensive Claims/ Avian Influenza/ Parvo Virus
10324-154	Maquat® 64-NHQ	2420-50%/80%	4.225	2.0	2.0	2.0	
10324-155	Maquat® 128-NHQ	2420-50%/80%	8.45	1.0	1.0	1.0	
10324-141	Maquat® 256-NHQ	2420-50%/80%	16.9	0.5	0.5	0.5	
10324-156	Maquat® 512-NHQ	2420-50%/80%	33.8	0.25	0.25	0.25	

Alkaline pH Disinfectants

EPA Reg. No.	Product Name	Active Ingredient	% Active	Dilution Ounces per Gallon			Notes
				Hospital Disinfectant	General Disinfectant	Sanitizer	
10324-164	Maquat® 256 PD	MQ2525M-50%/80%	12.5		0.5-0.75	0.75	Disinfectant/ Cleaner/ Non-Food Contact Sanitizer/ Non-Acid Bathroom Cleaner/ Athletic Surface Disinfectant/ Small Fly Ovicidal/ Avian Influenza
10324-58	Maquat® 128	MQ2525M-50%/80%	9.0	1.0	1.0	0.28-1.0	Disinfectant/ Cleaner/ Sanitizer/ Non-Acid Bathroom Cleaner/ Athletic Surface Disinfectant/ Small Fly Ovicidal/ Norovirus/ Ebola Virus/ Avian Influenza/ Parvovirus
10324-105	Maquat® 128 PD	MQ2525M-50%/80%	9.0	1.0	1.0	1.0	Disinfectant/ Cleaner/ Non-Food Contact Sanitizer/ Non-Acid Bathroom Cleaner/ Athletic Surface Disinfectant/ Small Fly Ovicidal/ Avian Influenza/ Norovirus
10324-59	Maquat® 64	MQ2525M-50%/80%	4.5	2.0	2.0	0.57-2.0	Disinfectant/ Cleaner/ Sanitizer/ Non-Acid Bathroom Cleaner/ Athletic Surface Disinfectant/ Small Fly Ovicidal/ Ebola Virus/ Avian Influenza/ Norovirus/ Parvovirus
10324-93	Maquat® 64 PD	MQ2525M-50%/80%	4.5	2.0	2.0	2.0	Disinfectant/ Cleaner/ Non-Food Contact Sanitizer/ Non-Acid Bathroom Cleaner/ Athletic Surface Disinfectant/ Small Fly Ovicidal/ Ebola Virus/ Norovirus/ Avian Influenza
10324-166	Maquat® 32	MQ2525M-50%/80%	1.563	4.0-6.0	4.0	1.6-6.0	Disinfectant/ Cleaner/ Sanitizer/ Non-Acid Bathroom Cleaner/ Non-Dulling to Floors/ Athletic Surface Disinfectant/ Small Fly Ovicidal/ Avian Influenza
10324-167	Maquat® 32 PD	MQ2525M-50%/80%	1.563	4.0	4.0	6.0	Disinfectant/ Cleaner/ Non-Food Contact Sanitizer/ Non-Acid Bathroom Cleaner/ Non-Dulling to Floors/ Athletic Surface Disinfectant/ Small Fly Ovicidal/ Avian Influenza
10324-57	Maquat® 42	MQ2525M-50%/80%	3.2	3.0	2.0		Disinfectant/ Cleaner/ Detergent/ Non-Acid Bathroom Cleaner/ Athletic Surface Disinfectant/ Avian Influenza/ Parvovirus
10324-71	Maquat® 280	MQ2525M-50%/80%	1.6	6.0	4.5		Disinfectant/ Cleaner/ Deodorizer/ Non-Acid Bathroom Cleaner/ Non-Dulling to Floors/ Athletic Surface Disinfectant/Avian Influenza/ Parvovirus

Household, Industrial, & Institutional



Alkaline pH Disinfectants Continued

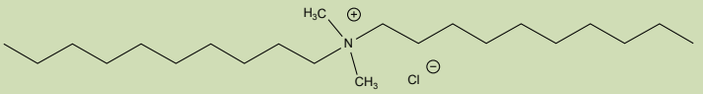
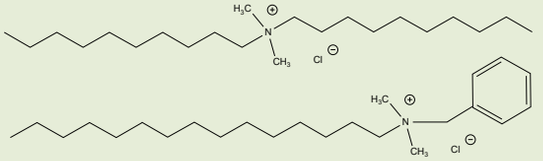
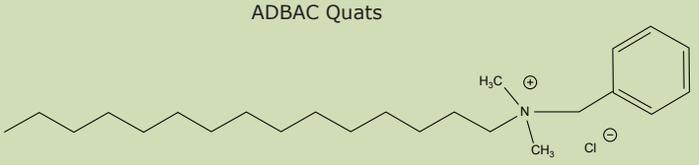
EPA Reg. No.	Product Name	Active Ingredient	% Active	Dilution Ounces per Gallon			Notes
				Hospital Disinfectant	General Disinfectant	Sanitizer	
10324-72	Maquat® 615-HD	MQ615M/ 624M	21.7	0.5	0.5	0.09	Disinfectant/ Non-Food Contact Sanitizer/ Cleaner/ Deodorizer/ Athletic Surface Disinfectant/ Small Fly Ovicidal/Avian Influenza
10324-169	Maquat® 615-MR	MQ615M/ 624M	5.5	2.0 oz. per gallon (Mold & Mildew)			Mold Remediation - Construction Materials , HVAC Systems, Water Damage Restoration
10324-80	Maquat® 5.5-M	MQ615M/ 624M	5.5	2.0	1.25	0.36	Disinfectant/ Cleaner/ Non-Food Contact Sanitizer/ Deodorizer/ Athletic Surface Disinfectant/ Small Fly Ovicidal/ Avian Influenza

No-Rinse Food and Non-Food Contact Sanitizers

EPA Reg. No.	Product Name	Active Ingredient	% Active	Dilution Ounces per Gallon			Notes
				Hospital Disinfectant	General Disinfectant	Sanitizer	
10324-198	Maquat® 702.5-M	MQ615M/ 624M	2.5	2.40	1.40	0.75-2.0	Disinfectant/ Sanitizer/ Non-Acid Bathroom Cleaner/ Athletic Surface Disinfectant/ Third Compartment Sink/ Laundry Sanitizer/ Ebola Virus/ Avian Influenza
10324-177	Maquat® 705-M	MQ615M/ 624M	5.0	1.20	0.70	0.25-0.5	Disinfectant/ Sanitizer/ Non-Acid Bathroom Cleaner/ Third Compartment Sink/ Laundry Sanitizer/ Ebola Virus/ Avian Influenza
10324-81	Maquat® 7.5-M	MQ615M/ 624M	7.5	0.78	0.44	0.25-0.67	Disinfectant/ Sanitizer/ Non-Acid Bathroom Cleaner/ Third Compartment Sink/ Laundry Sanitizer/ Norovirus/ Ebola Virus/ Avian Influenza
10324-117	Maquat® 710-M	MQ615M/ 624M	10.0	0.60	0.35	0.18 - 0.5	Disinfectant/ Sanitizer/ Non-Acid Bathroom Cleaner/ Third Compartment Sink/ Laundry Sanitizer/ Ebola Virus/ Avian Influenza
10324-159	Maquat® 710-HF	MQ615M/ 624M	10.0		1.00	0.25-0.50	High Foam Disinfectant/ Non-Food Contact Sanitizer - Drains, Entryways/ Avian Influenza
10324-115	Maquat® 750-M	MQ615M/ 624M	50.0	0.12	0.07	0.0375 - 0.2	High Concentrated Disinfectant/ Sanitizer/ Non-Acid Bathroom Cleaner/ Third Compartment Sink/ Laundry Sanitizer/ Ebola Virus/ Avian Influenza
10324-63	Maquat® 10	MQ2525M-50%/80%	10.0	0.80	0.60	0.25	Disinfectant/ Sanitizer/ Non-Acid Bathroom Cleaner/ Athletic Surface Disinfectant, Small Fly Ovicidal/ HIV, HCV/ HBV, Avian Influenza
10324-99	Maquat® 10-PD	MQ2525M-50%/80%	10.0	0.80	0.60	0.25	Disinfectant/ Non-Food Contact Sanitizer/ Non-Acid Bathroom Cleaner/ Athletic Surface Disinfectant/ Small Fly Ovicidal/ Perfume & Dye/ Avian Influenza
10324-142	Maquat® MQ2525M-14	MQ2525M-50%/80%	14.08	0.67	0.45	0.18-0.36	Disinfectant/ Sanitizer/ Non-Acid Bathroom Cleaner/ Athletic Surface Disinfectant/ Small Fly Ovicidal/ Avian Influenza
10324-94	Maquat® 20-M	MQ2525M-50%/80%	20.0	0.40	0.30	0.13	Disinfectant/ Sanitizer/ Non-Acid Bathroom Cleaner/ Athletic Surface Disinfectant/ Third Compartment Sink/ Horticultural & Ornamental Plant Treatments/ Small Fly Ovicidal/ Avian Influenza
10324-96	Maquat® 50DS	MQ2525M-50%/80%	50.0	0.16	0.12	0.04-0.10	Disinfectant/ Sanitizer/ Non-Acid Bathroom Cleaner/ Athletic Surface Disinfectant/ Small Fly Ovicidal/ Avian Influenza
10324-67	Maquat® MQ615-AS	MQ615M/ 624M	10.25		1.00	0.25	Multi-Purpose, No-Rinse Acid Cleaner/ Disinfectant/ Sanitizer/ Multiple Acid Options/ Avian Influenza/ Removes Milkstone or Beerstone
10324-194	Maquat® 2420-10%	2420-50%/80%	10.0	1.00	1.00	0.188-0.5	Disinfectant, Sanitizer, Cold Temperature Food Contact Sanitizer/ Non-Acid Bathroom Cleaner/ Athletic Surface Disinfectant/ Avian Influenza
10324-187	Maquat® 1010N-10%	4450-E/ 4480-E	10.0		1.00	0.188-0.3	Disinfectant/ Cleaner/ Sanitizer/ Athletic Surface Disinfectant/ Third Compartment Sink/ Ecologo
10324-111	Maquat® 1412-10% FCS	MC1412-50%/ 1412-80%E	10.0	1.00	1.00	0.25	Disinfectant/ Cleaner/ Sanitizer/ Third Compartment Sink/ Small Fly Ovicidal

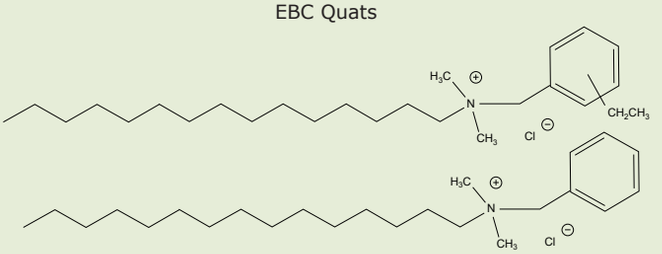
Maquat® EPA Registered Products

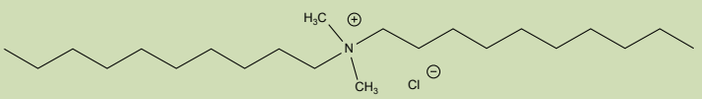
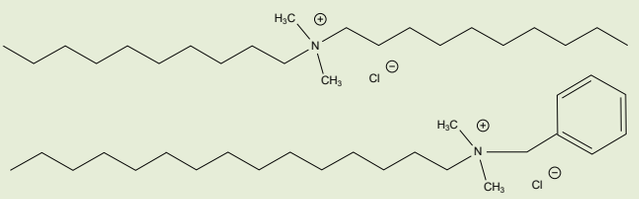
Pilot Chemical Company produces the highest quality and broadest range of EPA Registered Biocidal Quaternaries in the industry and continues to lead the industry with consistent high quality, product performance, and attentive customer service and support.

Maquat® Grade	Structure/Description	Cross Reference		
		Stepan		Lonza
		EPA #1839	EPA#6836	EPA# 47371
Dialkyl Quats 		Dialkyl (Dialkyl Dimethyl Ammonium Chloride) Quats are recognized as the most efficacious defined by outstanding germicidal performance, unusual tolerance for anionic surfactants, protein loads and hard water, and are FDA cleared for use as "indirect food additives" in sanitizing solutions for food contact surfaces at concentrations up to 400ppm active without a potable water rinse.		
40-50 (EPA Reg.#10324-31)	20% Dioctyl, 30% Didecyl, 50% Octyldecyl dimethyl ammonium chlorides	BTC 818 BTC 818-80%	Bardac 2050 Bardac 2080	FMB 302
4450-E (EPA Reg.#10324-34) 4480-E (EPA Reg.#10324-35)	Didecyl ammonium chloride	BTC 1010 BTC 1010-80%	Bardac 2250 Bardac 2280	FMB 210-5 FMB 210-8
Dialkyl Blend Quats 		Dialkyl (Dialkyl Dimethyl Ammonium Chloride) Quats blended quats benefit from the increased surfactant and fragrance solubility with ADBACs, while exhibiting high germicidal performance, tolerance for protein loads and hard water. Maquat® Dialkyl Blend Quats are FDA cleared for use as "indirect food additives" in sanitizing solutions for food contact surfaces at concentrations up to 400ppm active without a potable water rinse.		
MQ 615M (EPA Reg.#10324-51) MQ 624M (EPA Reg.#10324-52	40% n-Alkyl (50% C14, 40% C12, 10% C16) dimethylbenzyl ammonium chloride/ 60% Dioctyl, didecyl, octyldecyl dimethyl ammonium chlorides	BTC 885 BTC 888	Bardac 205M Bardac 208M	FMB 504 FMB 604-8
2420-50 (EPA Reg.#10324-126) 2420-80 (EPA Reg.#10324-127)	40% n-Alkyl (50% C14, 40% C12, 10% C16) dimethylbenzyl ammonium chloride/ 60% Didecyl ammonium chloride			FMB 504 FMB 604-8
ADBAC Quats 		ADBAC (Alkyl DimethylBenzyl Ammonium Chloride) Quats are generally referred to as First Generation or Single Chain Quats. The Maquat® ADBAC Series products provide a broad spectrum of bacteriological control at an economical price, and are FDA cleared for use as "indirect food additives" in sanitizing solutions for food contact surfaces at concentrations up to 200ppm active without a potable water rinse.		
LC12S-50% (EPA Reg.#10324-3) LC12S-80% (EPA Reg.#10324-129)	n-Alkyl (67% C12, 25% C14, 7% C16, 1% C18) dimethylbenzyl ammonium chloride	BTC 65	Bardac LB-50 BioQuat 50-65	FMB 504
MC1412-50% (EPA Reg.#10324-6) MC1412-80%E (EPA Reg.#10324-14)	n-Alkyl (50% C14, 40% C12, 10% C16) dimethylbenzyl ammonium chloride	BTC 835 BTC 8358	Barquat MB-50 Barquat MB-80 Hyamine 3500	FMB 451-5 FMB 451-8
MC1416-50% (EPA Reg.#10324-8) MC1416-80% (EPA Reg.#10324-9) MC1416-80% (EPA Reg.#10324-165)	n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethylbenzyl ammonium chloride	BTC 824 BTC 8248	Barquat MX-50 Barquat MX-80	FMB 4500-5 FMB 4500-8

Maquat® EPA Registered Products

Pilot Chemical Company produces the highest quality and broadest range of EPA Registered Biocidal Quaternaries in the industry and continues to lead the industry with consistent high quality, product performance, and attentive customer service and support.

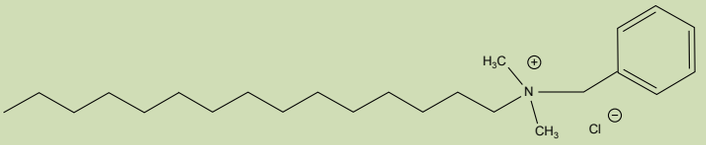
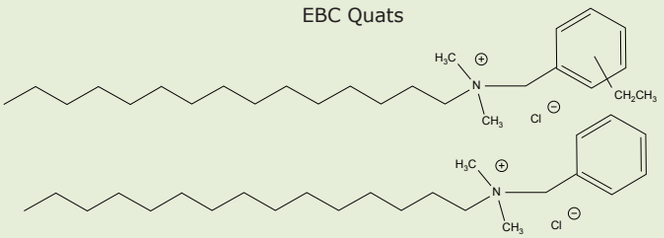
Maquat® Grade	Structure/Description	Cross Reference		
		Stepan		Lonza
		EPA #1839	EPA#6836	EPA# 47371
MC5815 (EPA Reg.#10324-98)	n-Alkyl (58% C14, 28% C16, 14% C12) dimethylbenzyl ammonium chloride		BioQuat 50-28	
MC6025-50% (EPA Reg.#10324-26)	n-Alkyl (60% C14, 25% C12, 15% C16) dimethylbenzyl ammonium chloride	BTC 2565 BTC 2568	Barquat PJ-50 Barquat OJ-80	FMB 65-15 FMB 65-28
TC76-50% (EPA Reg.#10324-1)	99.6% n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethylbenzyl ammonium chloride/ 0.4% n-Dialkyl (60% C14, 30% C16, 5% C12, 5% C18) methylbenzyl ammonium chloride	BTC 776	Barquat 1552	
EBC Quats 	EBC (Alkyl DimethylEthylbenzyl Ammonium Chloride) Quats (blended with ADBACs) are generally referred to as Second Generation or Dual Chain Quats, with the advantage of organic soil tolerance allowing for "one-step" cleaning and disinfecting. Mason® EBC quats are FDA cleared in sanitizing solutions for food contact surfaces up to 200ppm active without a potable water rinse			
MQ2525-50% (EPA Reg.#10324-17)	50% n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethylbenzyl ammonium chloride/ 50% n-Alkyl (50% C12, 30% C14, 17% C16, 3% C18) dimethylethylbenzyl ammonium chloride	BTC 2125	Barquat 4250	FMB 6075-5
MQ2525M-50% (EPA Reg.#10324-28) MQ2525M-80% (EPA Reg.#10324-27)	50% n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethylbenzyl ammonium chloride/ 50% n-Alkyl (68% C12, 32% C14) dimethylethylbenzyl ammonium chloride	BTC 2125M BTC 2125M-80	Barquat 4250Z Barquat 4280Z	FMB 3328-5 FMB 3328-8

Maquat® Grade	Structure/Description	BioRenewable %
Dialkyl Quats 		
40-50 (EPA Reg.#10324-31)	20% Dioctyl, 30% Didecyl, 50% Octyldecyl dimethyl ammonium chlorides	90
4450-E (EPA Reg.#10324-34)* 4480-E (EPA Reg.#10324-35)	Didecyl ammonium chloride	91
Dialkyl Blend Quats 		

* Maquat® 4450E/4480E EcoLogo® approved for use in Environmental Choice™ Program CCD-166 Disinfectants and Disinfectants-Cleaners.

Maquat® EPA Registered Products

Pilot Chemical Company produces the highest quality and broadest range of EPA Registered Biocidal Quaternaries in the industry and continues to lead the industry with consistent high quality, product performance, and attentive customer service and support.

Maquat® Grade	Structure/Description	BioRenewable %
MQ615M (EPA Reg.#10324-51) MQ624M (EPA Reg.#10324-52)	40% n-Alkyl (50% C14, 40% C12, 10% C16) dimethylbenzyl ammonium chloride/ 60% Dioctyl, didecyl, octyldecyl dimethyl ammonium chlorides	78
2420-50 (EPA Reg.#10324-126) 2420-80 (EPA Reg.#10324-127)	40% n-Alkyl (50% C14, 40% C12, 10% C16) dimethylbenzyl ammonium chloride/ 60% Didecyl ammonium chloride	79
	ADBAC Quats 	
LC12S-50% (EPA Reg.#10324-3) LC12S-80% (EPA Reg.#10324-129)	n-Alkyl (67% C12, 25% C14, 7% C16, 1% C18) dimethylbenzyl ammonium chloride	59
MC1412-50% (EPA Reg.#10324-6) MC1412-80%E (EPA Reg.#10324-14)	n-Alkyl (50% C14, 40% C12, 10% C16) dimethylbenzyl ammonium chloride	60
MC1416-50% (EPA Reg.#10324-8) MC1416-80% (EPA Reg.#10324-9)	n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethylbenzyl ammonium chloride	62
MC5815 (EPA Reg.#10324-98) MC5815-80% (EPA Reg.#10324-89)	n-Alkyl (58% C14, 28% C16, 14% C12) dimethylbenzyl ammonium chloride	61
MC6025-50% (EPA Reg.#10324-26)	n-Alkyl (60% C14, 25% C12, 15% C16) dimethylbenzyl ammonium chloride	60
TC76-50% (EPA Reg.#10324-1)	99.6% n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethylbenzyl ammonium chloride/ 0.4% n-Dialkyl (60% C14, 30% C16, 5% C12, 5% C18) methylbenzyl ammonium chloride	62
	EBC Quats 	
MQ2525-50% (EPA Reg.#10324-17)	50% n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethylbenzyl ammonium chloride/ 50% n-Alkyl (50% C12, 30% C14, 17% C16, 3% C18) dimethylethylbenzyl ammonium chloride	58
MQ2525M-50% (EPA Reg.#10324-28) MQ2525M-80% (EPA Reg.#10324-27)	50% n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethylbenzyl ammonium chloride/ 50% n-Alkyl (68% C12, 32% C14) dimethylethylbenzyl ammonium chloride	58

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