CleanGredients[®] - Product Guide For Safer Choice Formulations

Tradename	Value proposition	Features and benefits	Application area
AG™ 6206	Short chain alkyl polyglucoside - nonionic based on short chain fatty alcohol with relatively low foam.	 Approved by EPA for direct release into the environment High caustic stability Co-surfactant to boost performance cleaning formulation Good solubility in water containing high level of electrolytes 	 All Purpose Cleaners (APC) High alkaline cleaning Cleaning in Place (CIP) Machine dishwashing Offshore cleaners (REACH approved)
Alcoguard® H 5240	Water based bio-polymer providing the performance of full synthetic polymers while increasing biodegra- dability and sustainability.	 Anti-redeposition, dispersancy, anti-encrustation and detergency equal to or better than synthetic polyacrylates Improved compatibility with surfactants Improved calcium, iron and electrolyte tolerance Lower carbon footprint than synthetic polyacrylates 	 Consumer and commercial machine dishwashing Liquid and powder laundry Hard surface cleaners Acidic and alkaline cleaners
Alcoguard® H 5941	Second generation bio-based water soluble polymer which is more sustainably sourced and readily bio- degradable.	 Anti-redeposition, anti-encrustation and anti-film forming Best-in-class readily biodegradable water soluble polymer Dispersant and anti-scalent with improved calcium, iron and electrolyte stability Lowest carbon footprint polymer with up to 75% renewable, bio-based contents 	 Consumer and commercial machine dishwashing Liquid and powder laundry Hard surface cleaning Acidic and alkaline cleaning
Alcosperse® 602N Alcosperse® 602N DRY	Cost effective multi-purpose synthetic polymer with optimized molecular weight for cleaning formulations. Available as both the liquid and dry powder product forms to broaden customer formulation possibilities.	 Crystal growth inhibition preventing precipitation of carbonates, phosphates or silicates Dispersion of particulates in the cleaning bath to avoid settling and scaling on surfaces and fibers Increased bleach stability by binding heavy metals which destabilize chlorine species through catalytic reactions Reduces filming by soil dispersion, which minimizes organic components deposition on glass and dishware Available as aqueous solution or powder 	 Consumer and commercial machine dishwashing Chlorine bleach and bleach based cleaners Liquid and powder laundry Hard surface cleaners
Alcosperse® 726	Unique, high-purity hydrotroping acrylic/styrene copolymer.	 Hydrotroping of surfactants into heavy duty liquids Particulate and oily soil dispersion/suspension Protective corrosion inhibition Hypochlorite stable Calcium binding 	Liquid laundryMachine dishwashChlorine bleach based cleanersAlkaline cleaning
Berol® 226 SA	Optimized surfactant for high performance cleaning and degreasing.	Easy to formulateCost effective solutionWide range of applications	 Acidic and alkaline cleaners All Purpose Cleaners (APC) Vehicle cleaners Water based degreasers Deck and floor cleaners
Berol® 260 Berol® 266	Highly targeted, narrow range nonionic surfactants for more effective cleaning. Berol 260 excellent fatty soil removal. Berol 266 two cloud points for effective cleaning at high and low temperatures.	 Effective at very low concentrations Low residual free alcohol Better low temperature handling Reduced or no need for defoamers 	 Hard surface cleaning Vehicle cleaning Water based alkaline cleaners Microemulsions All Purpose Cleaners (APC)
Berol® 561	Multifunctional co-surfactant that elevates the degreasing power of nonionic surfactants.	 Delivers superior solubilization power Outperforms conventional hydrotropes Reduces or eliminates the need for hazardous solvents Corrosion inhibition 	All Purpose Cleaners (APC)HydrotropingAcidic and alkaline cleaners

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Berol® 609	High performance nonionic surfactant that directly replaces NP9 in cleaning formulations.	 Direct drop-in replacement for NP9 in aqueous cleaning formulations Lower pour point and viscosity than NP9 mean easier handling Dissolves much more rapidly in cold water than NP9 and without gelling 	 Acidic and alkaline cleaners Cleaning In Place (CIP) applications Pressure wash systems NPE replacers Vehicle cleaners
Berol® DGR 81	Optimized specialty surfactant for single surfactant systems.	 Good wetting and cleaning properties, together with builder it can replace solvent based cleaners Can be used in weak to strong acid conditions High solubility in water to formulate very high concentrated cleaning products Low to medium foaming depending on concentration and temperature 	 High alkaline cleaners Off-shore cleaning Traffic film remover Vehicle cleaning Highly concentrated cleaners and degreasers
Berol® DR-B1	High performance degreasing surfactant approved for direct release into the environment.	 Approved by EPA for direct release into the environment Easily formulated into highly effective cleaners and degreasers Maintains or even increases the perfomance of non-approved cleaners while allowing the formulator to make "direct release" claims 	 Marine and live-well cleaning Outdoor cleaning - house, deck & fence wash Vehicle cleaning
Dissolvine® GL-47-S	Cost effective, safe and "green"	 Soluble over a wide range of pH's Natural origin index of 0.56 Strong metal binding for hard water and transition metals 	 All types of Cleaning Scale removal Outdoor use Oxidant stability Laundry Detergents
Dissolvine® M-40	Cost effective, safe and "green"	Strong metal chelate for hard water and transition metals	Automatic Dish WashLaundry DetergentsHard Surface Cleaning
Ethylan® 1005 Ethylan® 1008 ♪✦	Low foaming, low aquatic toxicity, with excellent degreasing performance.	 Approved by EPA for direct release into the environment Exhibits excellent wetting and fatty soil removal in water based cleaning products Ethylan 1005 requires a hydrotrope to be water soluble 	 Engine cleaning Vehicle cleaning Micro emulsions All purpose cleaning Additive to laundry detergent Machine dishwashing Rinse aid for machine dishwashing
Peroxy-Blend® PB33	Optimized specialty oxidant containing hydrogen peroxide for use in acid to alkaline cleaning formulations.	 Approved by EPA for direct release into the environment Stable oxygen bleaching alternative Enhanced cleaning effect on metal Chlorine free environmentally friendly product Stable in acidic to mildly alkaline systems 	 Hard surface cleaning Metal cleaning & brightening Alkaline cleaners Soft surface cleaning (carpet) Stain removal & bleaching Wheel cleaning
Witconate™ NAS-88	Anionic, sustainable hytrotropes.	 Approved by EPA for direct release into the environment (Witconate[™] NAS-88) Imparts some cleaning in addition to coupling Hypochlorite stable 	 All Purpose Cleaners (APC) Liquid detergents Vehicle cleaning Water based alkaline cleaners Suitable for powder detergents