

Sanitizers



**Food & Beverage
Division**



**Institutional
Division**



An introduction to "sanitizers"

In all activities of production, handling and processing of food and ingredients for the production of food, the residual dirt that inevitably remains adherent to the plants and equipment used, is a potential source of contamination by microorganisms which find fertile ground for their growth because these residues are rich in nutrients of proteic, lipidic and glucidic nature. This obviously represents a potential health hazard and safety of consumers, so it becomes necessary every possible preventive action aimed at making hygienically suitable a plant, a surface or an environment where, the subsequent contact with the new foods to be treated, can affect the hygiene and the salubrity of the latter.

The set of operations with which it is possible to make a plant or an environment hygienically suitable for the production, handling and processing of food is called "sanitizing" and includes a first phase of "washing or cleaning", which consists in the removal of residues of dirt, and a subsequent step of "disinfection" which serves to destroy residual microorganisms.

The latter phase can be performed using compounds of various nature and action that can be classified amongst following three categories:

- **disinfectants** Chemical agents or preparations, which have the ability to destroy the vegetative forms of microorganisms with the exception, generally, of the spores. The term "disinfectant" however, according to current Italian law, can only be used for those products that are registered at the government ministry for health matters as medical-surgical device;
- **biocidal products** Directive 98/8/EC defines as biocidal products "Active substances and preparations containing one or more active substances, put up in the form in which they are supplied to the user, intended to destroy, deter, render harmless, prevent the action of, or otherwise exert a controlling effect on any harmful organism by chemical or biological means". In future, this definition could replace that of disinfectant;
- **sanitizers** Chemicals or preparations, not registered at the government ministry for health matters, but containing active ingredients with known and acknowledged effectiveness in the scientific and professional, **who perform the same action of disinfectants.**

On the basis of the potential risks to public health resulting from poor hygiene of plants and surfaces intended for contact with foods, EU regulations in force require companies in the food & beverage sector, the wholesale and retail food stores, the restaurant business classic and collective (ho.re.ca. sector) etc., the execution of the analysis risk and control of critical points of the processes based on the HACCP system (an acronym for Hazard Analysis and Critical Control Points); as well as implementation of consequent sanitizing procedures more effective and perfected; and therefore AQUOS, in order to provide more efficient and effective responses to the needs of its customers, offers several preparations with sanitizing action suitable to guarantee a high level of hygiene and safety in all activities operating in the production, processing and handling of food.



Food&Beverage

Bioxyl 1000
Oxyclorina
Spectrum PA 15
Spectrum PA 5
Spectrum PC
Spectrum PCF
Spectrum Oxy 100
Spectrum PQ
Spectrum BG
Spectrum G
Spectrum AT
Sanybac
Spectrum PW-CL 100
Spectrum Bio
Triameen D10
Glutacid



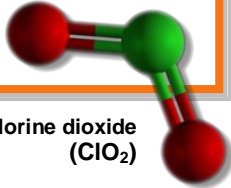
Institutional

Acticlor
Spirex PU
Blu Net
Spectrum Quant



Bioxyl 1000

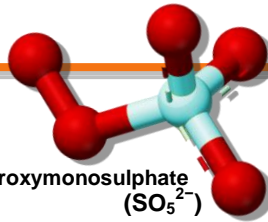
Solution of stable chlorine dioxide suitable as sanitizing agent for systems contaminated with biofilms, as an alternative to chlorine and peracetic acid (PAA) in food applications (not induces the formation of THM/AOX); contaminated cooling towers where the demand of traditional biocidal oxidizing products is too high and with poor control of biofilm (*Legionella*) or unacceptable levels of AOX, as agent for odor control and as chemical oxidant to reduce/remove contaminants, such as sulfides, mercaptans, phenols, tertiary amines.



Chlorine dioxide
(ClO₂)

Oxychlorina

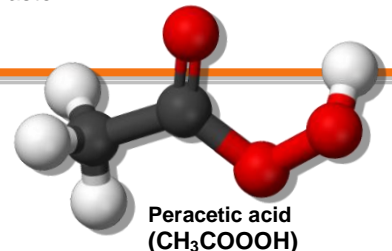
Sanitizing detergent powder, soluble in cold water, based on potassium peroxymonosulphate, surfactants, organic and inorganic acids and substances with sequestrant/buffer action. Particularly recommended for cleaning and contemporary sanitation of animal shelters and cages, work clothing, equipment, shelves, worktops, environments, floors, door jambs, food containers, etc. The solution of the product has a pleasant aroma of lemon and a magenta color which tends to discolour with time (controlled color change) in order to indicate the loss of effectiveness and thus the need to prepare a new one.



Ion peroxymonosulphate
(SO₅²⁻)

Spectrum PA 15

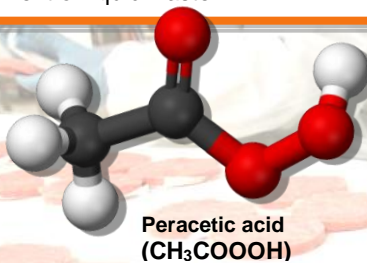
Sanitizing solution based on stabilized peracetic acid at 15% (PAA) not foaming and easy to rinse. It's normally used in the food, beverage bottling, in the dairy industry and the pharmaceutical industry as a terminal sanitizing for use in automated CIP systems. The product has also effective deodorant and bleaches properties, and can be used for the treatment of liquid waste.



Peracetic acid
(CH₃COOOH)

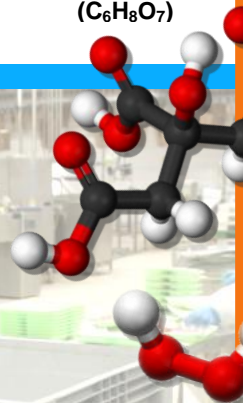
Spectrum PA 5

Oxidizing acid product with high efficacy sanitizer, based on stabilized peracetic acid 5% (PAA), normally used in the food, beverage bottling, in the dairy industry and the pharmaceutical industry as a terminal sanitizing for use in automated CIP systems. It also has effective deodorant and bleaches properties and can be used for the treatment of liquid waste.



Peracetic acid
(CH₃COOOH)

Citric acid (C₆H₈O₇)



Hydrogen peroxide
(H₂O₂)

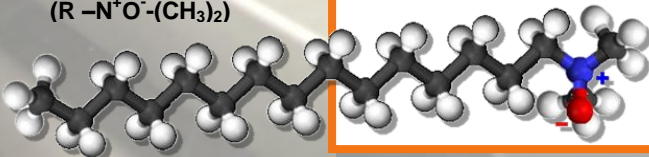
Spectrum PC

Solution based on active oxygen stabilized and citric acid, suitable for sanitizing plants and equipment normally used in the oenological sector and the food industry in general. It leaves no toxic residue after washing, so its use is indicated in the food industry where there is a high probability of its contact with food. Its use does not produce foam and is easy to rinse; in addition, after its action, the resulting wastewater are made only from very dilute solutions of hydrogen peroxide.

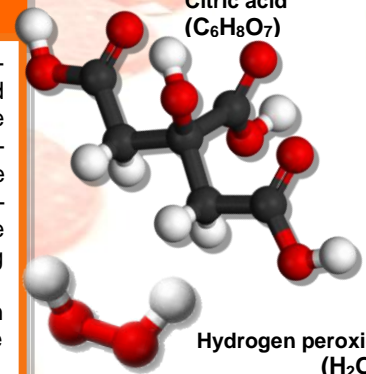
Spectrum PCF

Foaming detergent with sanitizing action, based on active oxygen stabilized and citric acid, suitable for the cleaning and contemporary sanitizing of equipment normally used in the oenological sector and the food industry in general. The presence of foaming surfactants in the formulation gives to the product a good wetting power and hence an effective detergent action; in addition increases its gripping action on the treated surfaces and this determines increases its gripping action on the treated surfaces and this causes an increase in contact time ensuring a more effective action of the sanitizers principles contained.

Alkylamine oxide (R -N⁺O⁻-(CH₃)₂)



Citric acid (C₆H₈O₇)

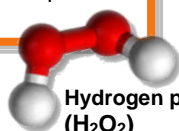


Hydrogen peroxide
(H₂O₂)



Spectrum Oxy 100

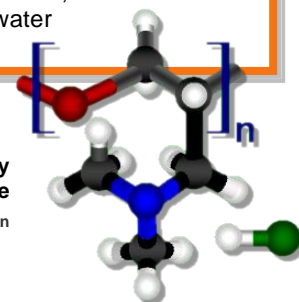
Concentrated solution with sanitizing action, based on hydrogen peroxide, suitable for sanitization of plants and equipment normally used in the food industries in general. Its application does not leave any toxic or harmful residue, so it is indicated in the food industry for those processes where there is a high probability of its contact with food. Its use does not produce foam and is easy to rinse.



Spectrum PQ

Sanitizing product, easy to rinse, suitable for manual sanitizing, by recirculation and in C.I.P. systems. It is not corrosive to steel, nickel, aluminum, iron, zinc, iron, brass, etc., is used in the **beverage industry** to sanitize mixers, tanks, pumps, filling machines, piping, etc.; in the **dairy industry** for the sanitization of C.I.P. plants, cold storage, molds, etc.; in the **meat industry** to sanitize work surfaces, knives, trolleys, cold storage, meat grinders, etc. and in **water treatment** for sanitizing of the feed and recirculation water of cooling towers.

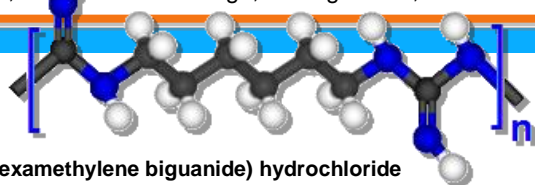
Polymerized quaternary ammonium chloride
(C₅H₁₂ClNO)_n



Spectrum BG

Sanitizing, based on polybiguanide hydrochloride, which is used **in farms and livestock farms** to sanitize environments, surfaces and plants and, since dermocompatible, also for the prophylaxis of lameness; **in the beverage sector** to sanitize mixers, tanks, pumps, filling machines, piping, etc.; **in the dairy industry** for the sanitization of cold storage, ripening boards, work surfaces, containers, conveyor belts, molds and, thanks to its low foam, for sanitization of C.I.P. plants and **in the food industry in general** to sanitize worktops, knives, trolleys, cold storage, meat grinders, etc.

Poly (hexamethylene biguanide) hydrochloride
(C₈H₁₇N₅HCl)_n

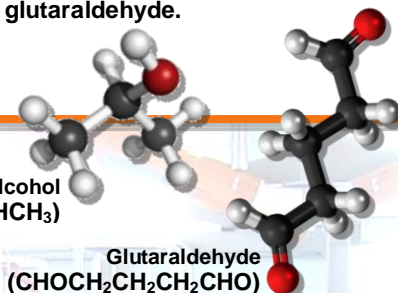


Spectrum G

Alcoholic hygienizing product specific for the food industry. The product does not stain, does not irritate and is also compatible with delicate materials such as glass, metals, plastics, latex and vinyl. It has a quick and effective sanitizing action thanks to the synergism of the active ingredients that compose it: **isopropyl alcohol** and **glutaraldehyde**.

Isopropyl alcohol
(CH₃CHOHCH₃)

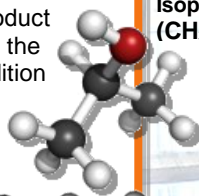
Glutaraldehyde
(CHOCH₂CH₂CH₂CHO)



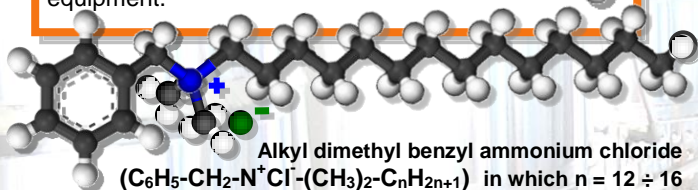
Spectrum AT

Sanitizer based on alcohol, quaternary ammonium salts (QAC) and organic sequestrant, specifically formulated for applications where it is not recommended to use products in aqueous solution. It's a product suitable for use on surfaces in contact with the food, because it evaporates quickly; in addition is also recommended for use in areas with high hygienic risk for sanitization of conveyors belts, filling machines and other equipment.

Isopropyl alcohol
(CH₃CHOHCH₃)



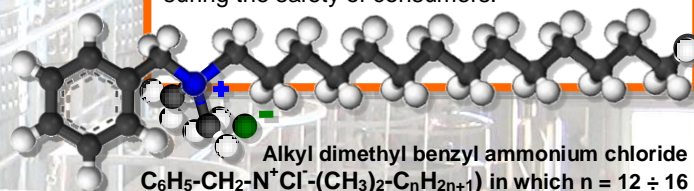
Alkyl dimethyl benzyl ammonium chloride
(C₆H₅-CH₂-N⁺Cl⁻-(CH₃)₂-C_nH_{2n+1}) in which n = 12 ÷ 16



Sanybac

Detergent with sanitizing action, ideal for cleaning and contemporary sanitizing of surfaces, floors, worktops and all the equipment for the preparation of food in general. Formulated with quaternary ammonium salts and surfactant substances, the product provides excellent cleaning power and a noticeable efficacy against a wide range of microorganisms. Its effectiveness in removing grease and dirt too dry, makes it particularly suitable for applications in the food, ensuring the safety of consumers.

Alkyl dimethyl benzyl ammonium chloride
C₆H₅-CH₂-N⁺Cl⁻-(CH₃)₂-C_nH_{2n+1} in which n = 12 ÷ 16

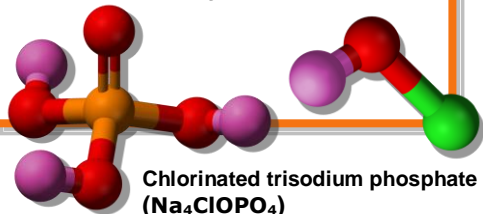




Spectrum PW-CL 100

Sanitizing detergent for plants, equipment, environments, surfaces, cycles of production and processing in the food industry, community, processing of milk and canned food, production and packaging of beverage, agricultural companies and herds.

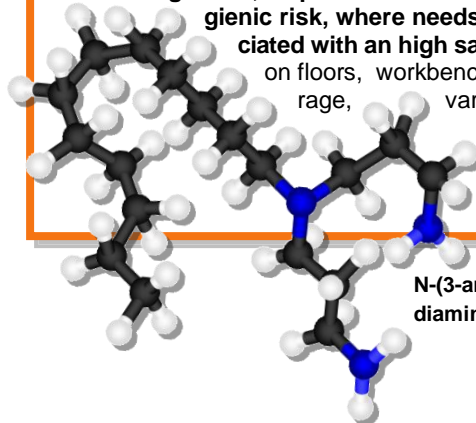
The product is also suitable for the sanitation of fresh vegetables.



Spectrum Bio

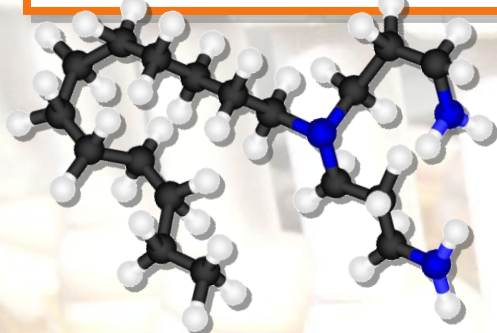
Degreaser with sanitizing action, for universal use, particularly recommended for the food industries. Effectively removes the organic residue from any surface and, at the same time, carries out an energetic sanitizing action thanks to the presence of specific amphoteric biocides.

The product is suitable for use in the poultry industry, dairies, slaughterhouses, collection and processing of milk and food industries in general; in particular for all environments with high hygienic risk, where needs an effective cleansing associated with an high sanitizing action. It can be used on floors, workbenches, conveyors belts, cold storage, various equipment, meat grinder, hoods, tiled, etc.



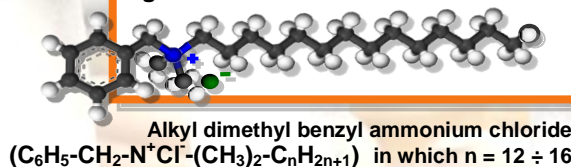
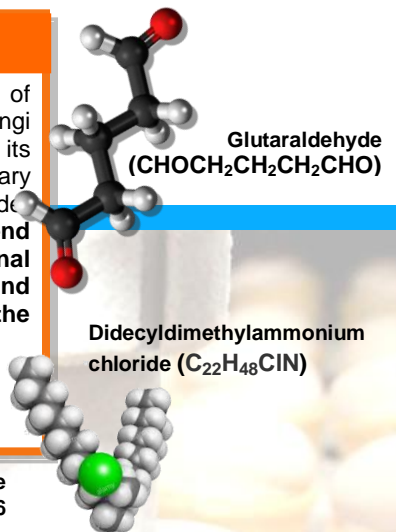
Triameen D10

Sanitizing product, for universal use, particularly recommended for food industries. It carries an energetic sanitizing action thanks to the presence, in the formulated, of specific amphoteric biocides **and is suitable for use in poultry industries, dairies, slaughterhouses, collection and processing of milk, food industries in general and in any environment with high risk hygienic.** It can be used on floors, worktops, conveyor belts, cold storage, equipment and utensils, meat grinder, hoods, tiled, etc.



Glutacid

Sanitizing product with a wide range of activities against bacteria, viruses, fungi and spores, thanks to the synergism of its active sanitizing components: quaternary ammonium compounds and glutaraldehyde. **The product is applied, at the end of the cleaning operations, as a terminal sanitizing for surfaces in the food and pharmaceutical industries and in the agro-zootechnical sector.**



Didecyl dimethyl ammonium chloride ($\text{C}_{22}\text{H}_{48}\text{ClN}$)

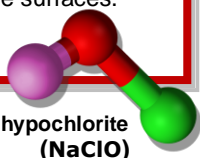
ALL OF THE SANITIZING PRODUCTS ABOVE MENTIONED, IN ACCORDANCE WITH THE REGULATIONS IN FORCE IN THE MATTER OF HEALTH AND SAFETY FOOD OF CONSUMER, MEET THE REGULATIONS (EC) NO 178/2002 AND NO 852/2004 IN FULL COMPLIANCE OF THE APPLICATION OF HACCP SYSTEM.





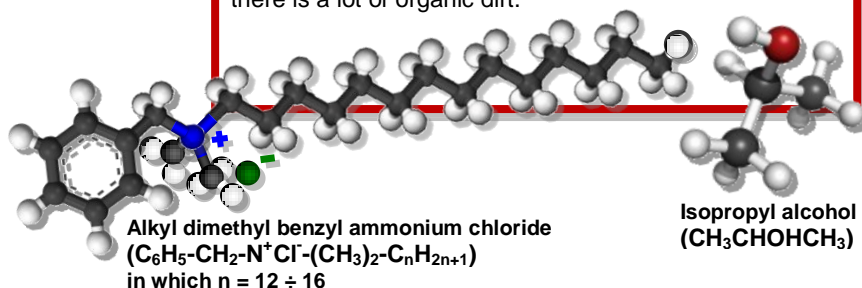
Acticlor

Detergent bleach, based on sodium hypochlorite, suitable for all the operations of cleaning and sanitizing. Its balanced formula and special ingredients give to the product a cleansing action higher than traditional bleach for cleaning of floors and other washable surfaces.



Spirex PU

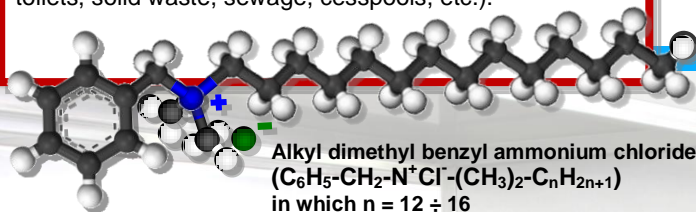
Detergent, with sanitizing action, ideal for cleaning and sanitizing of small surfaces such as work benches, kitchen furniture, steel sinks, cookers, toilets, etc. It has a strong degreasing action that makes it ideal for use in environments where foods are handled and where there is a lot of organic dirt.



Isopropyl alcohol
($CH_3CHOHCH_3$)

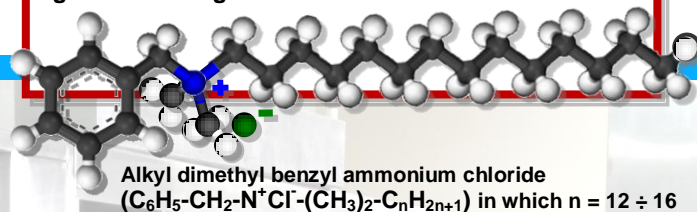
Blu Net

Blue liquid, highly concentrated, with action detergent, deodorizing and sanitizing. It destroys odors at the source, and can be used without any restriction because it does not contain formaldehyde. It has a fresh fruity fragrance and is completely miscible in water. For its sanitizing and deodorizing activities, it can be applied anywhere you need an effective block of the biological degradation processes which generate odors (chemical toilets, solid waste, sewage, cesspools, etc.).



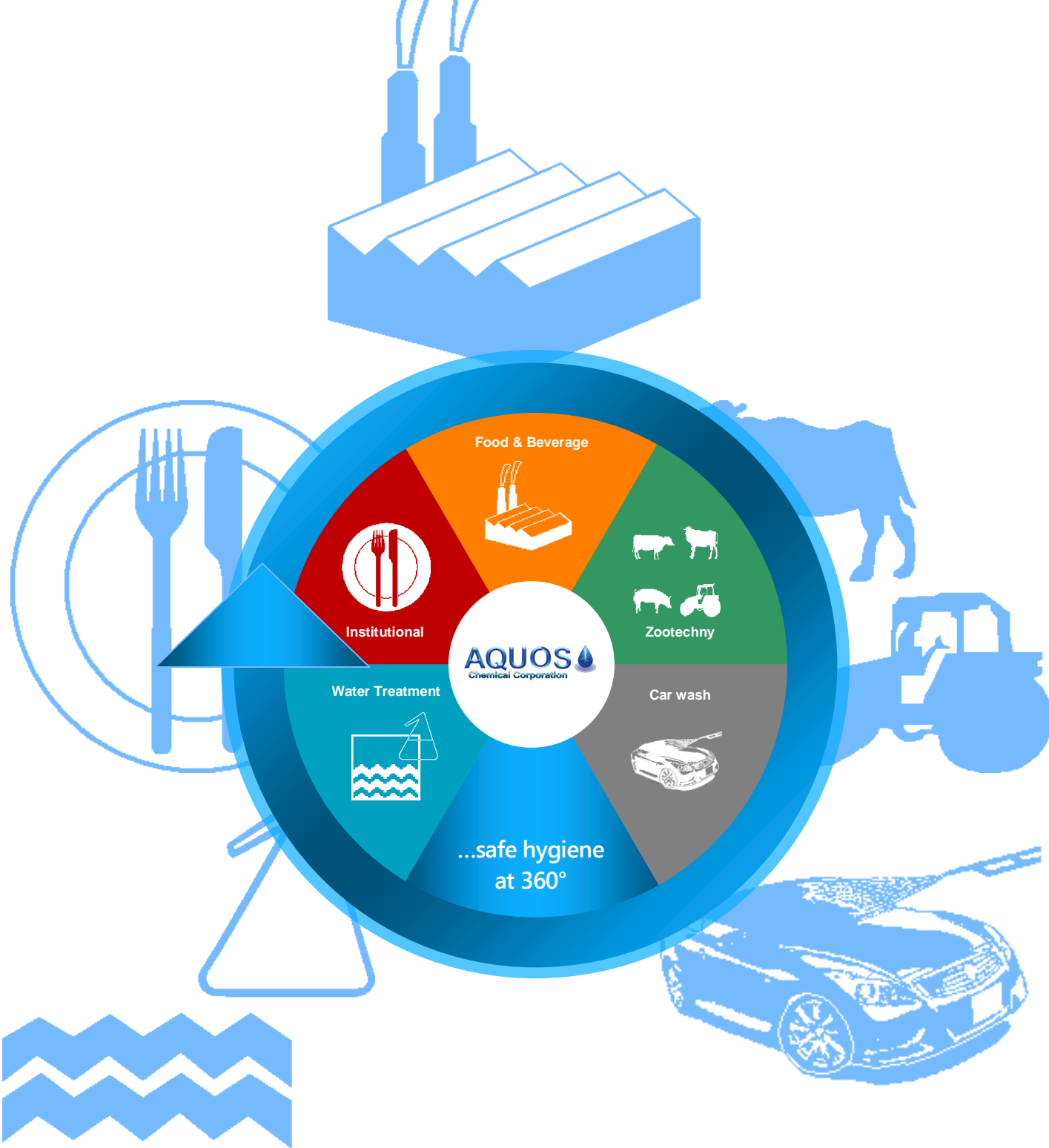
Spectrum Quant

Detergent, with sanitizing action, ideal for cleaning and sanitizing of surfaces, floors, equipment for the preparation of food, stainless steel and aluminum tables, pallets, plastic objects, chutes and trolleys transport, furniture, bins, cages and zones for animals, toilets, etc. **Its composition, based on citronella essential oil, also gives the product an effective repellent action against crawling insects.**



ALL OF THE SANITIZING PRODUCTS ABOVE MENTIONED, IN ACCORDANCE WITH THE REGULATIONS IN FORCE IN THE MATTER OF HEALTH AND SAFETY FOOD OF CONSUMER, MEET THE REGULATIONS (EC) NO 178/2002 AND NO 852/2004 IN FULL COMPLIANCE OF THE APPLICATION OF HACCP SYSTEM.





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....a little magic for a perfect clean

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