Care P
Cold Sterilant
for Dairy Industry
In the dairy industry, microbial hazards are a major food safety concern because milk is an ideal medium for the growth of bacteria and other microbes. Microbial contamination in the milk can be introduced from dairy animals, people handling animals and processes and the environment. Milk can contain pathogens like Salmonella, E.coli, Listeria monocytogenes, Staphylococcus aureus, Yersinia enterocolitica, Bacillus cereus, Clostridium botulinum, Mycobacterium bovis. Minimizing the costs to maximize production efficiency is a target for every organization. In the dairy industry infection control plays an important role in achieving this. Achieving high levels of hygiene helps optimize the process functioning. Care P range of products help maximize the hygiene levels.

Care-P is an effective cold sterilant based on Hydrogen Peroxide and Peroxyacids. Care P is free from halogens, aldehydes, quaternary ammonium compounds, silver salts, detergents and phosphates. Care P is non-toxic, bio-degradable and non-residual. It is a rapid surface, water and aerial disinfectant with characteristic deodorizing property.

FSANZ (Food Standards Australia New Zealand) has approved use of Hydrogen peroxide as a processing aid to control microorganisms during the manufacture of certain dairy products. FSANZ approved the application after "No public health and safety concerns were identified with the use of Hydrogen peroxide." The joint FAO/WHO expert committee on food additives has approved Peroxyacids and Hydrogen Peroxide combination as an additive into food, esp., Milk and dairy products as an antimicrobial (WHO Tech. Rep. Series, 928, 2005). The combination of hydrogen peroxide and peroxyacids is approved as a **secondary direct food additive permitted into food for human consumption with residues acceptable up to 75 ppm for hydrogen peroxide and 220 ppm for peroxyacids respectively**, by the USFDA.
Areas of Application

- Crate washing
- Tanker washing
- CIP (Cleaning in Place)
- Separator/Homogenizer Sanitization
- Udder washing
- Can washing
- Storage tanks
- Pasteurizer Sanitization
- UHT- plant applications
- Water treatment using Care P-WD
- Cooling water system
- Cold storage cabinets
- Aerial disinfection of process, packing and warehouse areas
- Surface disinfection of all process equipments in yoghurt, cheese, butter, dessert and ice cream production
- Milk, milk powder, skim milk and whey production area
- Production room walls, floors and equipment disinfection
- Hand disinfection and personal hygiene

Advantages

1. Aerial Disinfection of the Process, Packaging & Warehouse Areas:
   Care P be can be dispensed at 5-6% solution in water, as an aerosol using fogging/aerosoling machines, to render the environment free from any microbial contamination. This is the first major critical control to be achieved to curb cross contamination. This provides a safe allowance to the people and products to be exposed to the aerosol of Care P.

2. Surface disinfection of processing equipment and food contact surfaces:
   Care P is highly compatible with SS 304 (stainless steel) and hence an effective disinfectant for all the processing equipment and surfaces.

3. Deodorizing and Oxygen enrichment:
   Care P deodorizes the working environment by oxidizing the rancid milk smell in the milieu. Care P itself undergoes auto-oxidation to liberate free oxygen. This enriches the oxygen levels in the working environment.

4. Process Water Treatment:
   Care P can be used to treat process water. Care P treated water has minimized bioburden and this helps in controlling cross contaminants from water.

5. Fogging and decontamination of cold storages:
   Cold storages can be decontaminated by using Care P as an aerosol, with the products inside.
Other benefits

- Eliminates pathogenic and spoilage bacteria, enhancing the shelf life of the products.
- Does not affect the nutritive value of the treated products.
- Has no effect on the sensory quality of the treated products or their organoleptics.
- Does not leave behind residues.
- No DBPs (disinfection by products) are formed.

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