

DESTINY
Surface Disinfection



DESCRIPTION

DESTINY is a versatile wide spectrum disinfectant based on quaternary ammonium compound (QAC), for cleaning and disinfection of surfaces in food processing, dairy and beverage industries.

DESTINY offers an excellent disinfection activity against gram-positive and gram negative micro-organisms, bacteria, yeasts, moulds, fungi algae etc.

APPLICATIONS



DESTINY is used in food processing areas (ie : fisheries, poultrys, abattoirs, caterings, ice cream), breweries, dairies and soft plants.

DESTINY is recommended for sterilising food contacts surfaces, equipment, utensils, walls and floors (mildew), as well as footwear bath.,

PRODUCT BENEFITS

- Odourless
- Colourless
- Cost-effective
- Extremely fast acting
- Completely safe to use on food contact surfaces
- Effectively kills micro-organic growth at very low concentrations
- Non-toxic
- Non-corrosive
- Stable during storage and in use

PHYSICAL PROPERTIES

| | |
|-------------------------------|---------------|
| Appearance | Liquid |
| Colour | Clear |
| Specific Gravity @ 20°C | 0.995 ± 0.005 |
| pH | 7.8 ± 0.2 |

Active substance : Quaternary ammonium compounds, benzyl (C12 - C16) alkyl dimethyl, Chlorides (n° CAS 68424-85-1) = 100g/L.

APPROVALS / CONFORMANCES



MICROBIOLOGIC ACTIVITIES

EN 1276 Bactericidal (phase 2, step 1)

“Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of bactericidal activity of chemical disinfectants and antiseptics used in food, industrial, domestic and institutional areas.

| Test Organisms | ATCC No. | Organic Load (3.0 g/L bovine albumin) | Concentration % | Exposed Time @ 20°C | Titer Reduction log ₁₀ (Efficacy %) |
|-------------------------------|------------|---------------------------------------|-----------------|---------------------|--|
| <i>Staphylococcus aureus</i> | ATCC 6538 | Dirty Condition | 1.0% | 5 minutes | ≥ 6.23 (99.9999%) |
| <i>Enterococcus hirae</i> | ATCC 10541 | Dirty Condition | 1.0% | 5 minutes | ≥ 6.28 (99.9999%) |
| <i>Escherichia coli</i> | ATCC 10536 | Dirty Condition | 1.0% | 5 minutes | ≥ 6.17 (99.9999%) |
| <i>Pseudomonas aeruginosa</i> | ATCC 15442 | Dirty Condition | 1.0% | 5 minutes | ≥ 6.11 (99.9999%) |

DIRECTIONS FOR USE

The following will serve as a guideline for obtaining hygienic conditions in food processing plants, dairies, catering, soft drink manufacturer, ice-cream manufacturer, hospitals, etc.

| Applications | Directions for use |
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| DEODORISE | To deodorise waste containers and non- food areas of food processing plants. Mix 19.5ml DESTINY for every 2.5L of water. Apply solution with mop, sponge, cloth, or mechanical sprayer to hard surfaces. Allow surfaces to air dry. |
| GENERAL DISINFECTION | Disinfect previously cleaned hard non-porous surfaces such as walls, floors, sinks, finished woodwork, bathroom fixtures. Mix 19.5ml DESTINY per 5L of water. Thoroughly wet surfaces with mop, sponge, cloth, or coarse spray. Allow surfaces to remain wet for 10 minutes. Allow to air dry. |
| GENERAL DISINFECTION OF MEAT, POULTRY, AND OTHER FOOD PROCESSING FACILITIES | Prior to disinfection, food products and packaging materials must be removed from the room or carefully protected. For disinfecting previously cleaned non-porous surfaces such as walls, floors, and sinks, apply solution of 19.5ml per 2.5L of water (~800 ppm) with cloth, mop, sponge, or sprayer. Treated surfaces must remain wet for 10 minutes. For sprayer applications, use a coarse spray device. Spray 6-8 inches from the surface, rub with a brush, sponge, or cloth. Do not breathe spray. Food contact surfaces that have been disinfected with (QAC >200ppm) with |

| Applications | Directions for use |
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| | <p>must be rinsed thoroughly with potable water.</p> <p>For food contact surfaces disinfection without rinsing, apply solution of 4.88ml DESTINY per 2.5L of water (~200 ppm).</p> <p>For use on non-food contact surfaces as a general disinfectant in the brewery industry, use 400 to 800 ppm QAC. Follow disinfectant directions above.</p> |
| <p>FOGGING IN MEAT, POULTRY AND OTHER FOOD PROCESSING FACILITIES</p> <p>- Fogging is to be used as an adjunct to acceptable manual cleaning and disinfecting of room and machine surfaces. Prior to fogging, food products and packaging materials must be removed from the room or carefully protected.</p> | <p>After cleaning, fog desired areas using 1L per 25m³ of room area with DESTINY solution containing 58.6ml of DESTINY per 5L of water (~1200 ppm). Wear a dust mist respirator when mixing the use solution and pouring it into the fogging apparatus. Vacate the area of all personnel for a minimum of 2 hours after fogging and a minimum of 4 air exchanges (ACH) per hour in the facility. All food contact surfaces must be sanitised with a DESTINY solution of 200 ppm QAC (15.6 ml per 8L) prior to reuse. Allow food contact surfaces to drain thoroughly before operations are resumed.</p> <p>NOTE: The fog generated is irritating to the eyes, skin and mucous membranes. Under no circumstances must a room or building be entered by anyone within two hours of the actual fogging and a minimum of 4 air exchanges (ACH) per hour in the facility. If the building must be entered, then the individuals entering the building must wear a self-contained respirator approved by NIOSH, goggles, long sleeves, and long pants.</p> |
| <p>DISINFECTION – NON-FOOD CONTACT SURFACES</p> | <p>Pre-clean surfaces. Disinfect waterproof work boots, tools, forklifts, and hand trucks with 19.5ml DESTINY diluted in 2.5 to 5L water (400 - 800 ppm active QAC).</p> <p>For waterproof boots and tools, thoroughly apply use solution by immersion, foam, or coarse spray.</p> <p>For forklifts and hand trucks, thoroughly apply by coarse spray and foam.</p> <p>Treated surfaces must remain wet for 10 minutes. Allow to air dry.</p> |
| <p>SANITISING – NON-POROUS GLOVED HANDS</p> | <p>To prevent cross-contamination into animal areas and the packaging and storage areas of food plants, dip pre-washed (plastic, latex or other synthetic rubber) gloved hands into a suitable clean container that contains enough freshly made sanitising solution to cover the gloved area. Do not let sanitising solution come into contact with the exposed skin. Make up the sanitising solution by adding 29.25ml of this product per 15L of water (or equivalent use dilution) (~200 ppm QAC). Dip (soak) in solution for 60 seconds. NO POTABLE WATER RINSE IS ALLOWED. Change the sanitising solution in the bath at least daily or when solution appears dirty.</p> |
| <p>SANITISING EQUIPMENT-FOOD PROCESSING PLANTS</p> | <p>For sanitisation of equipment in food processing plants, remove gross food particles and excess soil by a pre-flush or pre-scrape, wash with a good detergent or compatible cleaner, rinse equipment thoroughly with clear water, then rinse equipment with sanitising solution of 29.25ml product to 15L of water (~200 ppm). All surfaces should be exposed to the sanitising solution for a period of not less than 1 minute. Allow equipment to drain thoroughly and air dry. DESTINY is an effective food contact surface sanitiser against <i>Escherichia coli</i>, <i>Staphylococcus aureus</i>, <i>Listeria monocytogenes</i>, and <i>Enterobacter sakazakii</i>.</p> |
| <p>ENTRYWAY SANITISING SYSTEMS</p> | <p>To prevent cross-contamination from area to area, set the system to deliver sanitising solution at 19.5 – 58.5ml DESTINY per 5L of water (or equivalent use dilution) (400-1200 ppm QAC). The foam (or spray) should cover the entire path of the doorway. Set the system so that a continuous wet blanket of sanitiser solution is delivered to the floor. Do not mix other foam additives to</p> |

| Applications | Directions for use |
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| | the sanitising solution. |
| SHOE BATH SANITISER | To prevent cross-contamination into animal areas, shoe baths containing 3cm of freshly made solution should be placed at all entrances to buildings and hatcheries. Sanitise in a solution of 7.8ml of DESTINY per 4L of water (or equivalent use dilution) (200 ppm). Scrape waterproof work boots (shoes) and place in solution for 60 seconds prior to entering area. Change the solution in the bath daily or sooner if solution appears diluted or soiled. |
| SHOE FOAM SANITISER | DESTINY can be used to prevent cross-contamination into animal areas and packaging and storage areas of food plants. Apply a foam layer approximately 1.5 to 5cm thick made from a solution of 31.2 – 46.8ml DESTINY per 4L of water (or equivalent use dilution) (800 to 1200 ppm QAC) at all entrances to buildings, hatcheries, production and packaging rooms by using a foam generating machine or aerator to apply foam layer. Follow the foaming directions as specified by the manufacturer of the foam generator/aerator. Scrape waterproof shoes. Stand and/or walk through foamed area for 60 seconds prior to entering area. Foam area must be washed and replaced daily or when it appears dirty. |
| ELEVATED TEMPERATURE SANITISING | For sanitization of equipment in food processing plants, remove gross food particles and excess soil by a pre-flush or pre-scrape, wash with a good detergent or compatible cleaner, rinse equipment thoroughly with clear water, then rinse equipment with a sanitising solution. At temperature of 49°C, this product is an effective sanitiser for food contact surfaces at 31.2ml DESTINY to 40L of water. All surfaces must be exposed to the sanitising solution for a period of not less than 1 minute. Allow equipment to drain thoroughly. NOTE: FOR MECHANICAL OPERATIONS prepared use solution may not be reused for sanitising but may be reused for other purposes such as cleaning. FOR MANUAL OPERATIONS fresh sanitising solution should be prepared as soon as they become diluted or soiled. DESTINY fulfills the criteria of Appendix F of the Grade “A” Pasteurized Milk Ordinance 1978. Recommendation of the U.S. Public Health Service in water up to 500 ppm of hardness calculated as CaCO ₃ when tested by the A.O.A.C. Germicidal and Detergent Sanitiser Official Method. |
| FOR CONTINUOUS TREATMENT OF MEAT AND POULTRY OR FRUIT AND VEGETABLE CONVEYORS | Remove gross food particles and excess soil by a pre-flush or pre-scrape, wash with a good detergent or compatible cleaner, rinse equipment thoroughly with clear water, then rinse equipment with a sanitising solution. During processing, apply DESTINY at a 200 ppm quat level to conveyors with ORAPI METERING DISPENSING EQUIPMENT or other suitable feeding equipment. Controlled volumes of sanitiser are applied to return portion of conveyor through nozzles so located as to permit maximum drainage of sanitiser from equipment and to prevent puddles on top of belt. During interruptions in operation, coarse spray equipment, peelers, collators, slicers and saws with ORAPI METERING DISPENSING EQUIPMENT dispensed DESTINY solution of 200 ppm quat. Conveyor equipment should be free of product when applying this coarse spray. |
| SANITISING SHELL EGGS INTENDED FOR FOOD | To sanitise previously cleaned food-grade eggs in shell egg and egg product processing plants, spray with a solution of 29.25ml DESTINY in 15L of warm water (200 ppm QAC). The solution should be warmer than the eggs, but not to exceed 54°C. Wet eggs thoroughly and allow draining. Eggs sanitised with this product shall be subjected to a potable water rinse only if they are broken immediately for use in the manufacture of egg products. Eggs must be |

| Applications | Directions for use |
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| | reasonably dry before casing or breaking. The solution must not be reused for sanitising eggs. Note: Only clean, whole eggs can be used for sanitising. Dirty, cracked, or punctured eggs cannot be sanitised. |

* Product not for sales in US.

| Dilution | QAC Concentration (approximate.) |
|-------------|----------------------------------|
| 1 ml per L | 100 ppm |
| 3 ml per L | 300 ppm |
| 5 ml per L | 500 ppm |
| 12 ml per L | 1,200 ppm |

Sanitising in food preparation areas should be followed by a rinse cycle using potable water if concentration exceed 200ppm of QAC.

In compliance with CFR 21 178.1010 when used in accordance to instructions.

When use at min 500ppm with a contact time of 10 minutes **DESTINY (DESTINY RTU^{1/200})** is effective against Coronaviruses (COVID-19)**

For specific recommendation please contact your local ORAPI representative.

**Base on National Environment Agency (Singapore) "Interim List of Household Products and Active Ingredient for Disinfection of COVID-19 Virus".

STORAGE & SAFETY

Two years stored in unopened original packaging in a cool and dry environment and away from high heat or direct sunlight.

Avoid contact with skin and eyes. In case of contact, wash with soap and rinse skin and flush eyes with running water for at least 15 minutes. Seek medical attention if effects persist. Avoid breathing mists and vapours. In case of inhalation, remove to fresh air. If swallowed, DO NOT induce vomiting, give water to drink. Seek medical attention. **Keep out of reach of children.**

Product reserved for professional use only. Use biocides with caution.

For further information please refer to the Safety Data Sheet.

PACKAGING

Ref: OH-3300-O2 Pail 25L
 Ref: OH-3300-N1 IBC 1000L
 Ref: OH-3300-R1 Jerry Can 4 X 5L (**DESTINY RTU^{1/200}**)

WARRANTY

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