



Boost™ 3200 CIP - Disinfectant Cleaner

Boost™ 3201 - Adjuvant

Boost™ 3201 SM - Adjuvant

PRODUCT DESCRIPTION

Boost™ 3200 CIP and Boost™ 3201 or Boost™ 3201 SM are a two-part solution to effectively disinfect food contact equipment and surfaces. The Boost program helps remove organic contaminants that are commonly found in hard-to-reach places. Boost 3200 CIP and Boost 3201 or Boost 3201 SM should be used in applications that require little to no foaming, like brine injector needle systems or other clean-in-place type applications.

BENEFITS

Saves Time and Money

- ▲ Cost-competitive with other solutions
- ▲ Easy to use, concentrated, 2-part liquid

Promotes Quality Assurance

- ▲ EPA-registered technology is specially formulated to sanitize and disinfect food and non-food contact surfaces
- ▲ Kills bacteria that may cause odors or organoleptic impacts to finished product
- ▲ Effective against mold and mildew
- ▲ Differentiated application to reduce high sporadic microbial counts
- ▲ Disinfecting brine injection needle systems with Boost 3200 CIP/Boost 3201 or Boost 3201 SM cleaning program decreases organisms that contribute to spoilage
- ▲ Thorough food contact disinfectant regimen for injector systems, components and other clean-in-place applications

Convenient and Safer to Use

- ▲ Easy and effective to use in low foam or enclosed clean-in-place applications
- ▲ Boost 3201 SM is safe to use on soft metal surfaces such as Spiral Freezers, Cooling units, HVAC systems, Dryers and Aluminum surfaces.

Environmental Implication

- ▲ Phosphate free
- ▲ Can be flushed into sanitary waste systems
- ▲ Quat (QAC) contribution is very low - below generally accepted inhibitory levels in waste water

PROPERTIES

	Boost 3200 CIP EPA Reg. No. 63761-8-1677	Boost 3201	Boost 3201 SM
Form	liquid	liquid	liquid
Color	clear	clear	clear
Odor	mild	none	none
Foam	low to none	none	none
Spec. Grav. @ 68°F (20°C)	1.0-1.03	1.15-1.2	1.15-1.2
pH at 1% solution	5.06	11.21	11-14.00
Phosphorus	Formula ingredients contain no phosphorus.	Formula ingredients contain no phosphorus.	Formula ingredients contain no phosphorus.

BOOST 3200 ACTIVE INGREDIENTS:

n-Alkyl (C ₁₄ 60%, C ₁₆ 30%, C ₁₂ 5%, C ₁₈ 5%) dimethylbenzyl ammonium chloride.....	3.00%
n-Alkyl (C ₁₂ 68%, C ₁₄ 32%) dimethylethylbenzyl ammonium chloride	3.00%
Hydrogen peroxide	6.30%
INERT INGREDIENTS:	87.70%
TOTAL:	100.00%

EPA Reg No. 63761-8-1677

STATEMENT OF ASSURANCE

This product is effective under the intended conditions of use as outlined on the product label or specified in a Sanitation Standard Operating Procedure (SS OP).

Letter of Guaranty is available from your Ecolab representative.

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Compatibility Chart for mixtures of Boost 3200 CIP and Boost 3201 or Boost 3201 SM
a - Rating is for mixture only

Metals	Boost 3200 CIP & Boost 3201 ^a	Boost 3200 CIP & Boost 3201 SM ^a
Carbon Steel	Compatible	Semi-Compatible
304 Stainless	Compatible	Compatible
316	Compatible	Compatible
Cast Iron	Compatible	Not Compatible
Galvanized	Darkening observed over time	Darkening observed over time
Copper	Darkening observed over time	Compatible
Brass	Darkening observed over time	Semi-Compatible
Bronze	Darkening observed over time	Compatible
Aluminum	Some grades showed pitting over time	Compatible
Titanium	No information	No information

DIRECTIONS FOR USE

Please use as directed on the product container label.

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

For disinfection and non-food contact surface sanitization for public health uses, this is part one of a two-part product and must be used with Boost 3201 or Boost 3201 SM.

For biocide and non-public health uses, the use of Boost 3201 or Boost 3201 SM may not be required.

Please consult the directions for use for specific instructions.

Boost 3200 CIP, when mixed with Boost 3201 or Boost 3201 SM is for use on washable hard, nonporous surfaces including: Trench drains, floor drains and other visible drain surfaces.

PRECLEANING INSTRUCTIONS (OPTIONAL STEP):

Although Boost 3200 CIP provides one-step cleaning and disinfection, precleaning may be desired for some areas, articles and surfaces in certain cases.

Prepare a precleaning solution by adding 1 -12.8 fl. oz. of Boost 3200 CIP and an equivalent amount of Boost 3201 or Boost 3201 SM per 1 gallon of water, depending on the level of visible soil to be precleaned.

Clean surfaces with precleaning solution by pouring, wiping, brushing, scrubbing, foaming, spraying with a coarse trigger sprayer, sponging, immersing, using a clean in place (CIP) system, pumping it through the system, drawing it through the system or mopping.

Rinse all food contact surfaces thoroughly with a potable water rinse.

SANITIZATION DIRECTIONS

Boost 3200 CIP, when mixed with Boost 3201 or Boost 3201 SM, reduces the following bacteria by 99.9% in 3 minutes according to the Standard Test Method for Efficacy of Sanitizers Recommended for Inanimate Non-Food Contact Surfaces: *Enterobacter aerogenes* and *Staphylococcus aureus*

SANITIZING DIRECTIONS FOR NON-FOOD CONTACT SURFACES:

Add 2 - 4 fl. oz. of Boost 3200 CIP and 2 - 4 fl. oz. of Boost 3201 or Boost 3201 SM to 1 gallon of water (1:1:64 - 1:1:32) (or equivalent use dilution) to sanitize hard, non-porous surfaces. Apply sanitizer

use solution to pre-cleaned, hard, non-porous surfaces with a cloth, mop, sponge, sprayer, or foaming device. Visibly wet surfaces by pouring, wiping, brushing, scrubbing, foaming, sponging, using a clean in place (CIP) system, pumping it through the system, drawing it through the system, mopping or by immersion. For sprayer applications, use a coarse pump or trigger sprayer. Spray 6-9 inches from surface. Do not breathe spray. Treated surfaces must remain visibly wet for 3 minutes, then wipe with sponge, mop or cloth, rinse, or allow to air dry. Mix fresh regularly. If the Boost 3200 CIP and Boost 3201 or Boost 3201 SM mixture must be used after 8 hours, use testing kit to ensure appropriate active ingredient concentration.

ONE STEP DISINFECTION AND CLEANING DIRECTIONS FOR HARD, NON-POROUS SURFACES

Boost 3200 CIP when mixed with Boost 3201 or Boost 3201 SM, is a one-step, cleaner and hospital-use disinfectant at 12.8 - 16.0 fl. oz. of Boost 3200 CIP and 12.8 - 16.0 fl. oz. of Boost 3201 or Boost 3201 SM per gallon of water (1:1:10 - 1:1:8), or equivalent use dilution. Bactericidal according to the current AOAC Use-Dilution Test Method modified in the presence of 400 ppm hard water plus organic soil against: *Pseudomonas aeruginosa* (*Pseudomonas*), *Staphylococcus aureus* (*Staph*), *Staphylococcus aureus - Methicillin Resistant*, *Salmonella enterica* (*Salmonella*), *Salmonella enterica subspecies enterica serovar Enteritidis* (*S. Enteritidis*) *Salmonella enterica subspecies enterica serovar Heidelberg* (*S. Heidelberg*), *Escherichia coli* O157:H7, *Listeria monocytogenes*, *Campylobacter jejuni*, *Cronobacter sakazakii*, *Burkholderia cepacia*.

APPLICATION INSTRUCTIONS:

To clean and disinfect in one step, remove gross visible soil from all areas, articles and surfaces to be disinfected using a pre-clean, pre-flush, or pre-scrape and, if necessary, presoak. Mix 12.8 - 16.0 fl. oz. of Boost 3200 CIP and 12.8 - 16.0 fl. oz. of Boost 3201 or Boost 3201 SM to 1 gallon of water.

Visibly wet surfaces by pouring, wiping, brushing, scrubbing, foaming spraying with a coarse trigger sprayer, sponging, using a clean in place (CIP)

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DIRECTIONS FOR USE (CONT.)

system, pumping it through the system, drawing it through the system, mopping or by immersion. For sprayer applications, use a coarse pump or trigger sprayer. Spray 6-9 inches from surface. Do not breathe spray. Allow surfaces to remain visibly wet for at least 10 minutes. Rinse all food contact surfaces thoroughly with a potable water rinse. Treated nonfood contact surfaces do not require a rinse and may be wiped with sponge, mop or cloth, rinse, or allow to air dry following the 10 minute contact time. Mix fresh regularly. If the Boost 3200 CIP and Boost 3201 or Boost 3201 SM mixture must be used after 8 hours, use testing kit to ensure appropriate active ingredient concentration.

FUNGICIDE: SPOILAGE ORGANISMS AND OTHER FUNGI

Boost 3200 CIP, when mixed with Boost 3201 or Boost 3201 SM kills the following spoilage organisms on hard, non-porous inanimate surfaces in one step at the concentrations listed in the table below, according to the current AOAC Use-Dilution Test Method modified in the presence of 400 ppm hard water plus organic soil. Allow surfaces to remain visibly wet for at least 10 minutes.

Spoilage Organism	Concentration
<i>Zygosaccharomyces parabaillii</i>	4 - 8 fl. oz. of Boost 3200 CIP and 4 - 8 fl. oz. of Boost 3201 or Boost 3201 SM per gallon of water (1:1:32 - 1:1:16)
Other Fungus	Concentration
<i>Trichophyton mentagrophytes</i>	12.8 - 16.0 fl. oz. of Boost 3200 CIP and 12.8 - 16.0 fl. oz. of Boost 3201 or Boost 3201 SM per gallon of water (1:1:10 - 1:1:8)

SVIRUSES

Boost 3200 CIP, when mixed with Boost 3201 or 3201 SM, is effective against the following viruses on hard, non-porous inanimate surfaces at the concentrations listed in the table below, in the presence of 400 ppm hard water:

Virus	Concentration	Minimum Contact Time	Precleaning Required?
Avian Influenza	2 - 4 fl. oz. of Boost 3200 CIP and 2 - 4 fl. oz. of Boost 3201 or Boost 3201 SM per gallon of water (1:1:64 - 1:1:32)	5 Minutes	No
Feline Calicivirus	12.8 - 16.0 fl. oz. of Boost 3200 CIP and 12.8 - 16.0 fl. oz. of Boost 3201 or Boost 3201 SM per gallon of water (1:1:10 - 1:1:8)	10 Minutes	No
Norovirus	12.8 - 16.0 fl. oz. of Boost 3200 CIP and 12.8 - 16.0 fl. oz. of Boost 3201 or Boost 3201 SM per gallon of water (1:1:10 - 1:1:8)	10 Minutes	No

Rotavirus	12.8 - 16.0 fl. oz. of Boost 3200 CIP and 12.8 - 16.0 fl. oz. of Boost 3201 or Boost 3201 SM per gallon of water (1:1:10 - 1:1:8)	10 Minutes	No
Newcastle Disease Virus	12.8 - 16.0 fl. oz. of Boost 3200 CIP and 12.8 - 16.0 fl. oz. of Boost 3201 or Boost 3201 SM per gallon of water (1:1:10 - 1:1:8)	10 Minutes	No
Porcine Respiratory & Reproductive Syndrome (PRRS) Virus	12.8 - 16.0 fl. oz. of Boost 3200 CIP and 12.8 - 16.0 fl. oz. of Boost 3201 or Boost 3201 SM per gallon of water (1:1:10 - 1:1:8)	10 Minutes	No
PED Virus	12.8 - 16.0 fl. oz. of Boost 3200 CIP and 12.8 - 16.0 fl. oz. of Boost 3201 or Boost 3201 SM per gallon of water (1:1:10 - 1:1:8)	10 Minutes	Yes. Refer to Precleaning Instructions prior to application.
Mouse Parvovirus	12.8 - 16.0 fl. oz. of Boost 3200 CIP and 12.8 - 16.0 fl. oz. of Boost 3201 or Boost 3201 SM per gallon of water (1:1:10 - 1:1:8)	10 Minutes	Yes. Refer to Precleaning Instructions prior to application.
Murine Minute Virus	12.8 - 16.0 fl. oz. of Boost 3200 CIP and 12.8 - 16.0 fl. oz. of Boost 3201 or Boost 3201 SM per gallon of water (1:1:10 - 1:1:8)	10 Minutes	Yes. Refer to Precleaning Instructions prior to application.

§ Avian Influenza A virus, PED virus, PRRS virus, and Newcastle Disease virus

Application Instructions:

Mix Boost 3200 CIP and Boost 3201 or 3201 SM per table instructions above. Visibly wet surfaces by pouring, wiping, brushing, scrubbing, foaming spraying with a coarse trigger sprayer, sponging, using a clean in place (CIP) system, pumping it through the system, drawing it through the system or mopping. Allow surfaces to remain visibly wet for listed contact time. Do not breathe spray. Rinse all food contact surfaces thoroughly with a potable water rinse. Mix fresh regularly. If the Boost 3200 CIP and Boost 3201 or 3201 SM mixture must be used after 8 hours, use testing kit to ensure appropriate active ingredient concentration.

FUNGISTAT/MILDEWSTAT

Boost 3200 CIP, when mixed with Boost 3201 or Boost 3201 SM, controls the growth of mold and mildew organisms (*Aspergillus niger*), and the odors they cause on hard, non-porous surfaces in one step at 12.8 - 16.0 fl. oz. of Boost 3200 CIP and 12.8 - 16.0 fl. oz. of Boost 3201 or Boost 3201 SM per gallon of water (1:1:10 - 1:1:8), or

equivalent use dilution, according to the current AOAC Use-Dilution Test Method modified in the presence of 400 ppm hard water plus organic soil. Allow surfaces to remain visibly wet for at least 10 minutes.

DISINFECTION AND SANITIZATION OF FOOD PROCESSING EQUIPMENT AND HARD SURFACES IN FOOD PROCESSING FACILITIES, BREWERIES, WINERIES AND OTHER BEVERAGE MANUFACTURING FACILITIES, RESTAURANTS, BARS, CAFETERIAS, INSTITUTIONAL KITCHENS, CONVENIENCE STORES, FOOD PREPARATION AREAS, FOOD STORAGE AREAS AND FOOD SERVICE AREAS:

NOTE: Before use in federally inspected meat and poultry food processing plants and dairies, food products and packaging materials must be removed from the room or carefully protected. Follow all applicable local health and sanitation codes for sanitizing food processing equipment post-disinfection.

Apply Boost 3200 CIP and Boost 3201 or Boost 3201 SM as a disinfectant, per One Step Disinfection and Cleaning Directions, or as a sanitizer, per Sanitization Directions. Optionally, preclean surfaces per the Precleaning Instructions. Rinse food contact surfaces with potable water before reuse. Mix fresh regularly. If the Boost 3200 CIP and Boost 3201 or Boost 3201 SM mixture must be used after 8 hours, use testing kit to ensure appropriate active ingredient concentration.

DISINFECTION AND SANITIZATION OF VETERINARY FACILITIES, ANIMAL CARE FACILITIES, ANIMAL LABORATORIES, ZOOS, PET SHOPS, KENNELS AND ANIMAL QUARTERS, FARM AND DAIRY FARM PREMISES, SWINE PREMISES, FARM AND DAIRY FARM PREMISE EQUIPMENT, SWINE PREMISE EQUIPMENT.

Any visibly soiled surfaces should be cleaned prior to disinfection. Remove all animals and feed from premises/room/barn/building, vehicles, and enclosures. Remove all litter and manure from floors, walls and surfaces of barns, pens, stalls, chutes, and other facilities and fixtures occupied or traversed by animals. Empty all troughs, racks, and other feeding and watering appliances. Visibly clean all surfaces with soap or detergent and rinse with water. Optionally, preclean surfaces per the Precleaning Instructions. Saturate all surfaces with a solution of Boost 3200 CIP and Boost 3201 or Boost 3201 SM, as a disinfectant, per One Step Disinfection and Cleaning Directions, or as a sanitizer, per Sanitization Directions. Immerse all halters, ropes, and other types of equipment used in handling and restraining animals, as well as forks, shovels, and scrapers used for removing litter and manure. Ventilate buildings, cars, boats and other closed spaces. Allow to air dry. Do not house livestock or employ equipment until treatment has been absorbed, set, or dried. Rinse food contact surfaces with potable water before reuse. Mix fresh regularly. If the Boost 3200 CIP and Boost 3201 or Boost 3201 SM mixture must be used after 8 hours, use testing kit to ensure appropriate active ingredient concentration.

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DIRECTIONS FOR USE (CONT.)

DISINFECTION OF POULTRY PREMISES, POULTRY EQUIPMENT, BROODERS AND HATCHERIES

Remove all poultry and feeds from premises, trucks, coops, and crates. Remove all litter and droppings from floors, walls and surfaces of facilities occupied or traversed by poultry. Empty all troughs, racks, and other feeding and watering appliances. Visibly clean all surfaces with soap or detergent and rinse with water. Optionally, preclean surfaces per the Precleaning Instructions. Saturate surfaces with the Boost 3200 CIP and Boost 3201 or Boost 3201 SM, as a disinfectant, per One Step Disinfection and Cleaning Directions, or as a sanitizer, per Sanitization Directions. Ventilate buildings, coops, and other closed spaces. Allow to air dry. Do not house poultry or employ equipment until treatment has been absorbed, set, or dried. Rinse food contact surfaces with potable water before reuse. Mix fresh regularly. If the Boost 3200 CIP and Boost 3201 or Boost 3201 SM mixture must be used after 8 hours, use testing kit to ensure appropriate active ingredient concentration.

DISINFECTION AND SANITIZATION OF SPIRAL FREEZERS, COOLING UNITS, COOLING TUNNELS, EVAPORATIVE CONDENSERS, REFRIGERATED TRUCKS, INDIVIDUAL QUICK FREEZING (IQF) FREEZERS, AND OTHER COIL SURFACES

Apply Boost 3200 CIP and Boost 3201 SM as a disinfectant, per One Step Disinfection and Cleaning Directions, or as a sanitizer, per Sanitization Directions. Visibly soiled surfaces should be cleaned prior to disinfection. Mix fresh regularly. If the Boost 3200 CIP and Boost 3201 SM mixture must be used after 8 hours, use testing kit to ensure appropriate active ingredient concentration. Surfaces must be defrosted and at room temperature prior to application.

BIOCIDE AND NON-PUBLIC HEALTH USES

For the biocide and non-public health uses below, the use of Boost 3201 or Boost 3201 SM is not required. Boost 3201 or Boost 3201 SM may be used as an adjuvant for Boost 3200 CIP in biocide and non-public health uses to adjust pH, inhibit corrosion and enhance cleaning. Penetrates, Removes and Destroys up to 99.9999% Biofilm and other Organic Contaminants.

FOR USE AS A BACTERICIDE, SLIMICIDE, MILDEWSTAT AND ALGICIDE IN RECIRCULATING COOLING WATER SYSTEMS, INCLUDING COOLING TOWERS, EVAPORATIVE CONDENSERS, EVAPORATIVE COOL CELLS, DAIRY SWEET WATER SYSTEMS AND BREWERY PASTEURIZERS. Effectively removes and controls biofilm and other organic contaminants in dairy sweet water systems and

brewery pasteurizers. **Biofilm claim not approved in California.**

DOSAGE RATES. Initial Dose for badly fouled systems: Add 0.5 to 4 gallons (500-4000 ppm) Boost 3200 CIP per 1000 gallons of water in the system. If cleaning is desired or if the pH of the system is below 8, optionally add simultaneously Boost 3201 or Boost 3201 SM at the rate of 1 to 3 times the volume of Boost 3200 CIP. Repeat until control is evident.

Routine Dose, when microbial control is evident:

Subsequent slug additions of 5 fl. oz. to 64 fl. oz. (40-500 ppm) Boost 3200 CIP per 1000 gallons of water (and if cleaning is desired or the pH of the system is below 8, optionally add Boost 3201 or Boost 3201 SM at the rate of 1 to 3 times the volume of Boost 3200 CIP) are employed every 2 to 5 days or as needed. The frequency of addition depends on the relative amount of bleed-off, the quality of the makeup water and rate of inflow of airborne or other contaminants. Make slug additions in the sump of water cooling towers.

Continuous Dosage: For continuous, or semi-continuous, low level dosage of Boost 3200 CIP, add 1 fl. oz. to 20 fl. oz. (8-165 ppm) Boost 3200 CIP per 1000 gallons of water (and if cleaning is desired or the pH of the system is below 8, Boost 3201 or Boost 3201 SM at the rate of 1 to 3 times the volume of Boost 3200 CIP).

AIR WASHERS. For use only in industrial air washing systems that maintain effective mist eliminating components. Effectively removes and controls biofilm and other organic contaminants in Industrial Water Scrubbing Systems. **Biofilm and biocidal claims not approved in California.**

DOSAGE RATES. Initial Dose for badly fouled systems: Add 3 to 16 gallons (3100-16150 ppm) of Boost 3200 CIP per 1000 gallons of water in the system. If cleaning is desired or if the pH of the system is below 8, optionally add simultaneously Boost 3201 or Boost 3201 SM at the rate of 1 to 3 times the volume of Boost 3200 CIP. If necessary, apply a solution containing 0.4 to 2 fl. oz Boost 3200 CIP (and if cleaning is desired or the pH of the system is below 8, optionally add Boost 3201 or Boost 3201 SM at the rate of 1 to 3 times the volume of Boost 3200 CIP) per gallon of water onto interior surfaces of the system that are not continuously submerged. Repeat until control is evident.

Routine Dose, when microbial control is evident:

Subsequent slug additions of 28 fl. oz. to 3 gallons. (225-3100 ppm) Boost 3200 CIP per 1000 gallons of water and if cleaning is desired or the pH of the system is below 8, optionally add Boost 3201 or Boost 3201 SM at the rate of 1 to 3 times the volume of Boost 3200 CIP are employed every 1 to 5 days or as needed. The frequency of addition depends on the relative amount of bleed-

off, the quality of the makeup water and rate of inflow of airborne or other contaminants. Make slug additions in the sump of Industrial Water Scrubbing Systems.

DRAINS. Effectively removes and controls plugging and odors caused by accumulation of biofilm and other organic contaminants in drains. Prevents stoppage and odors. **Biofilm and biocidal claims not approved in California.**

DOSAGE RATES. Initial Dose for badly fouled systems. This product can be poured, foamed, wiped, brushed, applied using a clean in place CIP system, pumping it through the system or mopping. Apply from 6 fl. oz to 15 fl. oz. Boost 3200 CIP per gallon of water to drain. Repeat until control is evident. Optionally, pour from 1 fl. oz. Boost 3200 CIP around or into one-inch diameter or smaller drains up to 90 fl. oz. Boost 3200 CIP, around or into three-inch diameter drains. If cleaning is desired, add simultaneously Boost 3201 or Boost 3201 SM at the same volume as Boost 3200 CIP (1 - 90 fl. oz). For foam cleaning, add 6-15 fl. oz. Boost 3200 CIP and an equal amount of Boost 3201 or Boost 3201 SM per gallon of water to a foaming device and foam the mixture into the drain.

Subsequent Dose: When microbial control is evident, subsequent additions of 1-6 fl. oz. Boost 3200 CIP per gallon of water are employed every 7 days or as needed. This product can be poured, foamed, wiped, brushed, applied using a clean in place CIP system, pumping it through the system or mopping. If cleaning is desired, add simultaneously Boost 3201 or Boost 3201 SM at the same volume as Boost 3200 CIP (1 - 6 fl. oz) per gallon of water. Optionally, subsequent additions of 1 - 6 fl. oz. Boost 3200 CIP into one-inch diameter or smaller drains up to 6 fl. oz. Boost 3200 CIP, into three-inch diameter drains, are employed every 7 days or as needed. If cleaning is desired, add simultaneously Boost 3201 or Boost 3201 SM at the same volume as Boost 3200 CIP (1 - 6 fl. oz.). For foam cleaning, add 1 - 6 fl. oz. Boost 3200 CIP and an equal amount of Boost 3201 or Boost 3201 SM per gallon of water to a foaming device and foam the mixture into the drain.