

Safety Steps and Procedures To Follow Prior To Applying Calla® 1452:

Always refer to the safety data sheet (SDS), technical data sheet (TDS), and label prior to applying **Calla® 1452** if you have any questions about this product.

Wear protective eyewear, clothing, and gloves to prevent **Calla® 1452** from making contact with the skin and eyes.

Calla® 1452 Product Information and Benefits:

Calla® 1452 eliminates **99.9%[^]** of the virus that causes **COVID-19^{***}** *on hard non-porous surfaces in 1 minute!*

[^]when used according to disinfection directions

******SARS-Related Coronavirus 2***

Calla® 1452 is a phosphate-free disinfectant and cleaner that works as a detergent, deodorizer, and **virucide**.

Calla® 1452 is a **fungicide** for **pathogenic fungi** and is a **mildewstat** on hard, non-porous, inanimate surfaces and is an effective general purpose cleaner, deodorizer, and disinfectant.

Calla® 1452 is formulated to a neutral pH and will not dull high-gloss floor finishes with repeated use.

Calla® 1452 disinfects hard, non-porous, and inanimate environmental surfaces, such as floors, walls, metal surfaces, stainless steel surfaces, glazed porcelain, glazed ceramic tile, plastic surfaces, vanity tops, shower stalls, bathtubs, cabinets, windows, toilets, sinks, mirrors, sealed granite, doorknobs, sealed fiberglass, chairs, and desks (**when used as directed**)

Calla® 1452 cleans, deodorizes, and disinfects transportation terminals and manufacturing facilities, where housekeeping is of prime importance in controlling cross-contamination from treated surfaces.

Calla® 1452 deodorizes a variety of places, such as garbage storage areas, empty garbage bins and cans, toilet bowls, and other areas which are prone to odors caused by microorganisms.

Calla® 1452 can be used in garages, boats, ships, campers, trailers, mobile homes, cars, buses, trains, taxis and airplanes.

Efficacy tests have demonstrated that **Calla® 1452** is an effective **bactericide** and **virucide** against a variety of organisms in water up to **400 ppm** hardness (as CaCO₃) in the presence of organic soil (**5% blood serum**). **Calla® 1452** is an effective fungicide against certain fungi in water up to **200 ppm** hardness (as CaCO₃) in the presence of organic soil (**5% blood serum**).

Calla® 1452 kills **HIV-1**, **HIV-2**, **HBV**, and **HCV** on pre-cleaned environmental surfaces/objects previously soiled with blood/body fluids in health care settings or other settings in which there is an expected likelihood of soiling of inanimate surfaces/objects with blood or body fluids, and in which the surfaces/objects likely to be soiled with blood or body fluids can be associated with the potential for transmission of **Human Immunodeficiency Virus Type 1 or Type 2 (HIV-1 or HIV-2) (associated with AIDS)**, **Hepatitis B Virus (HBV)**, and **Hepatitis C Virus (HCV)**.

Calla® 1452 has demonstrated effectiveness against viruses similar to the **Marburg** virus on hard non-porous surfaces. Therefore, **Calla® 1452** can be used against the **Marburg** virus when used in accordance with the directions for use against **Rotavirus (ATCC VR 899)** on hard non-porous surfaces. Refer to the **CDC** website at <https://www.cdc.gov/vhf/marburg/index.html> for additional information. Please see the most current **EPA** approved master label for product eligibility and for further details.

Calla® 1452 (EPA Reg # 1839-168-67026) has demonstrated effectiveness against viruses similar to **Hantavirus** on hard, non-porous surfaces. Therefore, this **product** can be used against **Hantavirus** when used in accordance with the directions for use against **Rotavirus (ATCC VR-899)** on hard, non-porous surfaces. Refer to the **CDC** website at <https://www.cdc.gov/hantavirus/hcp/clinical-overview/hps.html> for additional information.

Procedures For Applying Calla® 1452:

Do not mix **Calla® 1452** with detergents or other chemicals.



Procedures For Applying Calla® 1452 (Cont From Page 1):

Disinfection: To disinfect inanimate, hard non-porous surfaces, add **4 ounces** of Calla® 1452 Neutral Disinfectant Cleaner **per gallon** of water. Apply solution with a mop, cloth, sponge, hand pump trigger sprayer, or low pressure coarse sprayer so as to wet all surfaces thoroughly. Allow to remain wet for **10 minutes**, then remove excess liquid. For sprayer applications, spray **6-8 inches** from surface, rub with brush, sponge, or cloth. Do not breathe spray mist. For heavily soiled areas, a pre-cleaning step is required. Follow these same procedures if using Calla® 1452 for deodorizing.

To disinfect toilet bowls: Remove debris and soils from surfaces with bowl brush. Add **4 ounces** of Calla® 1452 to the bowl water and mix. Use brush or sponge to apply this solution to all bowl surfaces above water line. Scrub surfaces completely, making sure to scrub under the rim. Let stand for **10 minutes** and flush.

Bacterial Stability Of Use Solution: Tests confirm that Calla® 1452 when diluted at **4 ounces/gallon** in hard water up to **400 ppm** (as CaCO₃) remains effective against **Pseudomonas aeruginosa**, **Staphylococcus aureus** and **Salmonella (choleraesuis) enterica** for up to **4 weeks** when stored in a sealed container such as a spray bottle at room temperature. If Calla® 1452 becomes visibly dirty or contaminated, the use-solution must be discarded and fresh use-solution prepared. Always use clean, properly labeled containers when diluting Calla® 1452. Bactericidal stability of the use-solution does not apply to open containers, such as buckets or pails.

Fungicidal Activity: At the **4 ounce per gallon** dilution, Calla® 1452 is fungicidal against the **pathogenic fungi**, **Trichophyton Mentagrophytes (Athlete's Foot Fungus) (a cause of ringworm)** and **Candida Albicans**. Apply solution with a cloth, sponge, or hand pump trigger sprayer to hard, non-porous surfaces found in bathrooms, shower stalls, locker rooms, exercise facilities or other clean, hard non-porous surfaces commonly contacted by bare feet. Allow the surface to remain wet for **10 minutes**, then remove excess liquid. Diluted Calla® 1452 should be applied **daily or more frequently** with heavy facility use.

Mildewstat: To control mold and mildew (**Aspergillus niger**) and the odors they cause on pre-cleaned, hard, non-porous inanimate surfaces, add **4 ounces** of Calla® 1452 **per gallon** of water. Apply solution with a cloth, mop, sponge, or hand pump trigger sprayer making sure to wet all surfaces completely. Let air dry. Prepare a fresh solution for each use. Repeat application at **weekly intervals** or when mildew growth appears.

Virucidal Activity: Calla® 1452 when used on environmental, inanimate, hard, non-porous surfaces exhibits effective **virucidal** activity against **HIV-1, HIV-2, Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), Herpes Simplex Type 1 (causative agent of fever blisters), Herpes Simplex Type 2 (genital), Influenza A2/Hong Kong, Vaccinia, Rotavirus, Human Coronavirus (ATCC VR-740, Strain 229E), SARS associated Coronavirus, Bovine Viral Diarrhea Virus (BVDV), Pseudorabies, Bovine Rhinotracheitis, Feline Leukemia, Feline Picornavirus, Avian Influenza A Virus H9N2, Avian Influenza A Virus H3N2, Canine Distemper Virus, Rabies Virus, Paramyxovirus (Mumps) and Porcine Respiratory & Reproductive Syndrome Virus (PRRSV)**. Add **4 ounces** of Calla® 1452 **per gallon** of water. For heavily soiled areas, a pre-cleaning step is required. Apply solution with a cloth, mop, sponge, hand pump trigger sprayer or low pressure coarse sprayer so as to wet all surfaces thoroughly. Allow the surface to remain wet for **10 minutes**, then remove excess liquid.

General Cleaning: Apply Calla® 1452 to soiled area with a mop, cloth, sponge, hand pump trigger sprayer or low pressure coarse sprayer. Calla® 1452 can be diluted at **4 ounces per gallon** or applied at **full strength**. Thoroughly wet soiled surface and scrub as necessary.

Procedures For Applying Calla® 1452 (Cont From Page 2):

Bacterial Activity: At the 4 ounce per gallon dilution (or equivalent dilution), Calla® 1452 demonstrates effective disinfectant activity against the organisms: *Pseudomonas aeruginosa* PRD-10, *Salmonella* (choleraesuis) enterica, *Staphylococcus aureus*, *Staphylococcus aureus* (clinical isolate), *Bordetella bronchiseptica*, *Corynebacterium ammoniagenes*, *Enterobacter aerogenes*, *Enterobacter cloacae*, *Enterobacter cloacae* (clinical isolate), *Enterococcus faecalis*, *Enterococcus faecalis* (clinical isolate), *Escherichia coli*, *Escherichia coli* (clinical isolate), *Fusobacterium necrophorum*, *Klebsiella pneumoniae* subsp. *pneumoniae*, *Lactobacillus casei* subsp. *rhannosus*, *Listeria monocytogenes*, *Pasteurella multocida*, *Proteus vulgaris*, *Proteus mirabilis* ATCC 9921, *Proteus mirabilis* ATCC 25933, *Salmonella* (paratyphi B) enterica, *Salmonella* (typhi) enterica, *Salmonella* (typhimurium) enterica, *Salmonella* (pullorum) enterica, *Serratia marcescens*, *Shigella sonnei*, *Shigella flexneri* Type 2b, *Shigella dysenteriae*, *Staphylococcus aureus* subsp. *aureus*, *Staphylococcus epidermidis*, *Staphylococcus epidermidis* (clinical isolate), *Streptococcus pyogenes* (Clinical - Flesh Eating Strain BIRD M3), *Streptococcus pyogenes* Group A, *Xanthomonas maltophilia* (clinical isolate), Vancomycin resistant *Enterococcus faecalis* (VRE), Methicillin resistant *Staphylococcus aureus* (MRSA), Vancomycin intermediate resistant *Staphylococcus aureus* (VISA), Community Associated Methicillin resistant *Staphylococcus aureus* (CA-MRSA) NRS 123 Genotype USA400, Community Associated Methicillin resistant *Staphylococcus aureus* (CA-MRSA) NRS 384 Genotype USA300, *Salmonella* (enteritidis) enterica, Ampicillin resistant *Acinetobacter baumannii*, Cefazolin resistant *Acinetobacter baumannii*, Ceftazidime resistant *Acinetobacter baumannii*, Ceftriaxone resistant *Acinetobacter baumannii*, Gentamicin resistant *Acinetobacter baumannii*, Tobramycin resistant *Acinetobacter baumannii*, Ciprofloxacin resistant *Acinetobacter baumannii*, Levofloxacin resistant *Acinetobacter baumannii* and Bactrim resistant *Acinetobacter baumannii*.

9.) Contact Time: Allow surface to remain wet for 10 minutes.

Areas Where Calla® 1452 Should Be Applied:

Calla® 1452 should be applied on:

- * Glazed Ceramic Tile
- * Plastic Surfaces
- * Floors
- * Walls
- * Metal Surfaces
- * Windows
- * Toilets
- * Sinks
- * Mirrors
- * Sealed Granite
- * Doorknobs
- * Sealed Fiberglass
- * Chairs
- * Desks
- * Stainless Steel Surfaces
- * Glazed Porcelain
- * Transportation Terminals
- * Manufacturing Facilities
- * Automotive Garages
- * Boats
- * Ships
- * Campers
- * Trailers
- * Cars
- * Buses
- * Taxis
- * Trains



Areas Where Calla® 1452 Should Be Applied (Continued From Page 3):

- * Mobile Homes
- * Airplanes
- * Cabinets
- * Bathtubs
- * Shower Stalls
- * Vanity Tops
- * Hospitals
- * Nursing Homes
- * Homes and Households
- * Private Residences
- * Schools
- * Food Service Establishments
- * Office Buildings
- * Lodging Establishments
- * Retail Businesses
- * Athletic and Recreation Facilities
- * Sports Stadiums
- * Amphitheaters
- * Convention Centers



Calla® 1452 Product Pictures and Zip-Chem® Product Packaging Part Numbers and Additional Materials To Order:

Calla® 1452

*Case of 8 each Gallon (4 each of 3.8 Liter (3.785 Litres) Bottles)-**009450**

*5 Gallon (18.9 Liter (Litres)) Pail-**007247**

				Mop	Wiping Devices	Application Equipment	
				Pails	Other Containers	Spraying Equipment	Buckets
Labeling Devices	Labels	Mixing Devices	Diluting Equipment	Brushing Devices		Protective Clothing	Scrubbing Devices

1 Gallon (3.8 Liter (3.785 Litre))
Bottle (NSN: 6840-01-656-7851)



5 Gallon (18.9 Liter (Litre))
Pail (NSN: 6840-01-600-4177)

For application questions regarding **Calla® 1452**, contact **Zip-Chem® Aviation Products** at (1) 408 782 2335 or zipchem@addevmaterials.com.