



## AIRCRAFT CLEANERS & DISINFECTANTS

**CALLA® 1452**



Page 1 of 11

### *Product description:* **NEUTRAL DISINFECTANT CLEANER**

#### **FEATURES:**

- ▶ **Calla® 1452** eliminates **99.9%<sup>^</sup>** of the virus that causes **COVID-19\*\*\*** *on hard non-porous surfaces in 1 minute!*  
*<sup>^</sup>when used according to disinfection directions*  
***\*\*\*SARS-Related Coronavirus 2***
- ▶ A phosphate-free disinfectant and cleaner
- ▶ A Detergent and Deodorizer
- ▶ A Virucide
- ▶ A Fungicide (**Pathogenic Fungi**)
- ▶ A Mildewstat (**On Hard Non-Porous, Inanimate Surfaces**)



#### **KEY BENEFITS:**

- ▶ Does not stain aircraft interiors and plastics
- ▶ Provides effective cleaning, deodorizing, and disinfecting
- ▶ Disinfects hard, non-porous, and inanimate environmental surfaces, such as glazed ceramic tile, plastic surfaces, floors, walls, metal surfaces, windows, toilets and sinks, mirrors, sealed granite, doorknobs, sealed fiberglass, chairs, desks, stainless steel surfaces, and glazed porcelain (**when used as directed**)

Rev: 20066H  
02-09-2022

 For more information contact us :  
[zipchem@addevmaterials.com](mailto:zipchem@addevmaterials.com)

 Part of 



## AIRCRAFT CLEANERS & DISINFECTANTS

**CALLA® 1452**



Page 2 of 11

### *Product description:*

## **NEUTRAL DISINFECTANT CLEANER**

**Calla® 1452** qualifies for emerging viral pathogen claims per the EPA's 'Guidance to Registrants: Process for Making Claims Against Emerging Viral Pathogens not on EPA-Registered Disinfectant Labels' when used in accordance with the appropriate use directions indicated below:

**Calla® 1452** meets the criteria to make claims against certain emerging viral pathogens from the following viral categories:

- Enveloped viruses

### **SPECS:**

- AMS 1452 (Disinfectant Aircraft, General Purpose) (Meets requirements)
- AMS 1530B (Wipe-Off Cleaner) (Meets requirements)
- AMS 1550B (Cleaner for Interior) (Meets requirements)
- AMS 1453 (Disinfectant Cleaner For Aircraft Interior) (Meets requirements)
- Boeing D6-7127 (Meets requirements)
- Boeing D6-17487 (Meets requirements)
- NAVAIR: 01-1A-509-2
- NSN: 6840-01-600-4177 (5 Gallon (18.9L) Pail)
- NSN: 6840-01-656-7851 (Case of 4 each Gallon (3.8L) Bottles)
- T.O.: 1-1-691, 1C-130A-23 and 1C-5A-23-1

### **APPLICATIONS:**

- ✓ **Disinfection** – To disinfect inanimate, hard, and non-porous surfaces, add 4 fluid ounces (118 ml) of **Calla® 1452** per 1 gallon (3.8L) of water. Apply the solution with a mop, cloth, sponge, hand pump trigger sprayer, or low pressure coarse sprayer. That way, all of the surfaces can be thoroughly coated with water. Allow the surfaces to remain wet for 10 minutes.
- ✓ **Mildewstat** – To control mold and mildew (such as *Aspergillus niger*) including the odors they create on pre-cleaned, hard, and non-porous inanimate surfaces, add 4 fluid ounces (118 ml) of **Calla® 1452** per 1 gallon (3.8L) of water. Apply the solution with a cloth, mop, sponge, or hand pump trigger sprayer. Make sure all of the surfaces are completely covered with water. Allow the surfaces to air dry after covering them with water. Prepare a fresh solution for each use. Repeat application at weekly intervals or when mildew growth appears.



## AIRCRAFT CLEANERS & DISINFECTANTS

**CALLA® 1452**



Page 3 of 11

*Product description:*

### **NEUTRAL DISINFECTANT CLEANER**

#### **APPLICATIONS:**

- ✓ **Fungicidal Activity** – At the 4 fluid ounces (118 ml) per dilution level, **Calla® 1452** is fungicidal against pathogenic fungi, such as *Trichophyton Mentagrophytes* and *Candida Albicans*. Apply the solution with a cloth, sponge, or hand pump trigger sprayer to hard and non-porous surfaces. Allow the surface to remain wet for 10 minutes. Remove the excess liquid after 10 minutes. The diluted **Calla® 1452** should be applied daily or more frequently if it is used heavily in a facility.
- ✓ **Note:** **Calla® 1452** should not be used on food contact surfaces if food is expected to be served there immediately. If any surface needs to be disinfected prior to food being served there immediately, use **AeroDis® 7127**.

#### **PHYSICAL PROPERTIES:**

- ▶ **% Active:** 2.713%
- ▶ **Density:** 8.38 lbs/gal (1004 g/L)
- ▶ **Flash Point:** Not Flammable
- ▶ **pH:** 6.4

#### **AVAILABLE PACK SIZES:**

- ▶ Case of 4 each Gallon (4 each of 3.8L) Bottles (**Calla® 1452 Concentrate**)-009450
- ▶ 5 Gallon (18.9 L) Pails (**Calla® 1452 Concentrate**)-007247
- ▶ Starter Kit (Comprised of 6 **Calla® 1452 RTU** 32 fl oz (946 ml) **Spray Bottles** and 6 **Pre-Metered Cartridges** Per Case)-103793



 For more information contact us :  
[zipchem@addevmaterials.com](mailto:zipchem@addevmaterials.com)

 Part of 





## AIRCRAFT CLEANERS & DISINFECTANTS

**CALLA® 1452**



Page 4 of 11

### Product description: **NEUTRAL DISINFECTANT CLEANER**

#### AVAILABLE PACK SIZES:

- ▶ Case of 24 Calla® 1452 RTU Refill Cartridges-103795



**Note:** When you run out of Calla® 1452 RTU spray cartridges, purchase a new box of cartridges and keep the Calla® 1452 RTU Spray Bottles which can be reused continuously! Do not throw out the empty Calla® 1452 RTU Spray Bottle!

For more information contact us :  
[zipchem@addevmaterials.com](mailto:zipchem@addevmaterials.com)





## AIRCRAFT CLEANERS & DISINFECTANTS

**CALLA® 1452**



Page 5 of 11

### Product description: **NEUTRAL DISINFECTANT CLEANER**

#### **VIRUCIDAL DATA:**

**Test Method:** U.S. E.P.A. Pesticide Assessment Guidelines, Subdivision G: Product Performance, Section 91-2 (f), and Section 91-30, (d), (e), November 1982.

Protocols for Testing the Efficacy of Disinfectants against Hepatitis B Virus (HBV) (EPA, Federal Register, Vol. 65, No. 166, 8/25/2000, p. 51828).

Protocol for Testing Disinfectants against Hepatitis C Virus using Bovine Viral Diarrhea Virus as approved by the U.S. EPA on August 15, 2002.

**Test Conditions:** 10 minute contact time, 5% organic soil load, sterile glass petri dishes, 400 ppm hard water, 21-24°C (70°F-75°F) exposure temperature, and 4 fl oz/gal (118 ml/3.8L) dilution.

**Results:**

Test Organism	Sample	Titer Reduction	Contact Time
*SARS-Related Coronavirus 2 [SARS-CoV-2] [USA-WA1/2020] [BEI NR-52281]	A B	-	<b>1 minute</b>
*Avian Influenza A Virus (H3N2) (Avian Reassortant) (ATCC VR-2072)	A B	≥4.25 log <sub>10</sub> ≥4.25 log <sub>10</sub>	10 minutes
*Avian Influenza Virus, Type A (Turkey/WIS/66) (H9N2)	A B	≥4.0 log <sub>10</sub> ≥4.0 log <sub>10</sub>	10 minutes
*Bovine Rhinotracheitis, strain LA (ATCC VR-188)	A B	≥5.0 log <sub>10</sub> ≥5.0 log <sub>10</sub>	10 minutes
#Bovine Viral Diarrhea Virus (BVDV)	A B	5.9 log <sub>10</sub> 5.9 log <sub>10</sub>	10 minutes
*Canine Distemper Virus, strain Lederle (ATCC VR-128)	A B	≥6.25 log <sub>10</sub> ≥6.25 log <sub>10</sub>	10 minutes
Feline Leukemia (VR-717)	-	-	10 minutes
*Feline Picornavirus, strain FRV (ATCC VR-649)	A B	≥4.25 log <sub>10</sub> ≥4.25 log <sub>10</sub>	10 minutes
†Hepatitis B Virus (HBV) (Duck Hepatitis B Virus-DHBV)	A B	4.5 log <sub>10</sub> 4.7 log <sub>10</sub>	10 minutes
#Hepatitis C Virus (HCV) (Bovine Viral Diarrhea Virus-BVDV)	A B	5.9 log <sub>10</sub> 5.9 log <sub>10</sub>	10 minutes
*Herpes Simplex Type 1 (ATCC VR-260)	A B	≥5.0 log <sub>10</sub> ≥5.0 log <sub>10</sub>	10 minutes
*Herpes Simplex Type 2 (ATCC VR-734)	A B	≥6.0 log <sub>10</sub> ≥6.0 log <sub>10</sub>	10 minutes

For more information contact us :  
**zipchem@addevmaterials.com**





## AIRCRAFT CLEANERS & DISINFECTANTS

**CALLA® 1452**



Page 6 of 11

### Product description: **NEUTRAL DISINFECTANT CLEANER**

#### **VIRUCIDAL DATA:**

Test Organism	Sample	Titer Reduction	Contact Time
*Human Immunodeficiency Virus, HTLV-IIIRF, strain of HIV-1 (associated with AIDS)	A B	$\geq 3.5 \log_{10}$ $\geq 3.5 \log_{10}$	10 minutes
*Human Immunodeficiency Virus type 2 (HIV-2), strain CBL-20	A B	$\geq 3.25 \log_{10}$ $\geq 3.25 \log_{10}$	10 minutes
*Human Coronavirus (ATCC VR-740, strain 229E)	A B	$\geq 3.0 \log_{10}$ $\geq 3.0 \log_{10}$	10 minutes
*Influenza A2, strain Hong Kong (ATCC VR-544)	A B	$\geq 4.25 \log_{10}$ $\geq 4.25 \log_{10}$	10 minutes
*Paramyxovirus (Mumps) (ATCC VR-1438)	A B	$\geq 3.0 \log_{10}$ $\geq 3.0 \log_{10}$	10 minutes
*Porcine Respiratory & Reproductive Syndrome Virus (PRRSV), strain NVSL	A B	$\geq 5.0 \log_{10}$ $\geq 5.0 \log_{10}$	10 minutes
*Pseudorabies, strain Aujeszky (ATCC VR-135)	A B	$\geq 5.25 \log_{10}$ $\geq 5.25 \log_{10}$	10 minutes
*Rabies Virus (attenuated CDC ERA strain)	A B	$3.0 \log_{10}$ $3.0 \log_{10}$	10 minutes
*Rotavirus, strain SA-11 (ATCC VR-899)	A B	$4.5 \log_{10}$ $4.5 \log_{10}$	10 minutes
*SARS Associated Coronavirus (ZeptoMetrix)	A B	$3.03 \log_{10}$ $3.03 \log_{10}$	10 minutes
*Vaccinia, strain WR (ATCC VR-119)	A B	$\geq 5.5 \log_{10}$ $\geq 5.5 \log_{10}$	10 minutes

**Conclusions:** Under the conditions of this investigation, **Calla® 1452** demonstrated virucidal activity against **SARS-Related Coronavirus 2 (SARS-CoV-2)**, **Avian Influenza A Virus (H3N2)**, **Avian Influenza Virus, Type A (H9N2)**, **Bovine Rhinotracheitis**, **Bovine Viral Diarrhea Virus (BVDV)**, **Canine Distemper Virus**, **Feline Leukemia (VR-717)**, **Feline Picornavirus**, **Hepatitis B Virus (HBV)**, **Hepatitis C Virus (HCV)**, **Herpes Simplex Type 1**, **Herpes Simplex Type 2**, **Human Coronavirus**, **Human Immunodeficiency Virus (HIV-1)**, **Human Immunodeficiency Virus Type 2 (HIV-2)**, **Influenza A2**, **Paramyxovirus (Mumps)**, **Porcine Respiratory & Reproductive Syndrome Virus (PRRSV)**, **Pseudorabies**, **Rabies Virus**, **Rotavirus**, **SARS Associated Coronavirus**, and **Vaccinia**, according to criteria established by the U.S. Environmental Protection Agency for registration and labeling of a disinfectant product as a virucide.



## AIRCRAFT CLEANERS & DISINFECTANTS

**CALLA® 1452**



Page 7 of 11

### *Product description:* **NEUTRAL DISINFECTANT CLEANER**

#### **DISINFECTION DATA:**

**Test Method:** AOAC Use Dilution

**Test Conditions:** 5% organic soil load, 10 minute contact time, stainless steel carrier substrates, 400 ppm hard water, 20°C (68°F) exposure temperature, and 4 fl oz/gal (118 ml/3.8L) dilution.

**Results:**

Test Organism	No. of Carriers			
	Sample	Exposed	Positive	Contact Time
Ampicillin resistant Acinetobacter baumannii (clinical isolate-Fairfax Hospital CI 02001)	A	10	0	10 minutes
	B	10	0	
Bactrim resistant Acinetobacter baumannii (clinical isolate-Fairfax Hospital CI 02001)	A	10	0	10 minutes
	B	10	0	
Bordetella bronchiseptica (ATCC 31437)	A	10	0	10 minutes
	B	10	0	
Cefazolin resistant Acinetobacter baumannii (clinical isolate-Fairfax Hospital CI 02001)	A	10	0	10 minutes
	B	10	0	
Ceftazdime resistant Acinetobacter baumannii (clinical isolate-Fairfax Hospital CI 02001)	A	10	0	10 minutes
	B	10	0	
Ceftriaxone resistant Acinetobacter baumannii (clinical isolate-Fairfax Hospital CI 02001)	A	10	0	10 minutes
	B	10	0	
Ciprofloxacin resistant Acinetobacter baumannii (clinical isolate-Fairfax Hospital CI 02001)	A	10	0	10 minutes
	B	10	0	
Community Associated Methicillin Resistant Staphylococcus aureus (CA-MRSA) (NRS 123, Genotype USA400)	A	10	0	10 minutes
	B	10	0	
	C	10	0	
Community Associated Methicillin Resistant Staphylococcus aureus (CA-MRSA) (NRS 384, Genotype USA300)	A	10	0	10 minutes
	B	10	0	
	C	10	0	
Corynebacterium ammoniagenes (ATCC 6871)	A	10	0	10 minutes
	B	10	0	
Enterobacter aerogenes (ATCC 13048)	A	10	0	10 minutes
	B	10	0	
Enterobacter cloacae (ATCC 23355)	A	10	0	10 minutes
	B	10	0	





## AIRCRAFT CLEANERS & DISINFECTANTS

**CALLA® 1452**



Page 8 of 11

*Product description:*  
**NEUTRAL DISINFECTANT CLEANER**

**DISINFECTION DATA:**

Test Organism	No. of Carriers			
	Sample	Exposed	Positive	Contact Time
Enterobacter cloacae (clinical isolate)	A B	10 10	0 0	10 minutes
Enterococcus faecalis (ATCC 19433)	A B	10 10	0 0	10 minutes
Enterococcus faecalis (clinical isolate)	A B	10 10	0 0	10 minutes
Escherichia coli (ATCC 11229)	A B	10 10	0 0	10 minutes
Escherichia coli (clinical isolate)	A B	10 10	0 0	10 minutes
Escherichia coli O111:H8 (BAA-184)	-	-	-	10 minutes
Fusobacterium necrophorum (ATCC 27852)	A B	10 10	0 0	10 minutes
Gentamicin resistant Acinetobacter baumannii (clinical isolate-Fairfax Hospital CI 02001)	A B	10 10	0 0	10 minutes
Klebsiella pneumoniae subsp. pneumoniae (ATCC 13883)	A B	10 10	0 0	10 minutes
Lactobacillus casei subsp. rhamnosus (ATCC 7469)	A B	10 10	0 0	10 minutes
Levofloxacin resistant Acinetobacter baumannii (clinical isolate-Fairfax Hospital CI 02001)	A B	10 10	0 0	10 minutes
Listeria monocytogenes (ATCC 35152)	A B	10 10	0 0	10 minutes
Methicillin Resistant Staphylococcus aureus (MRSA) (ATCC 33592)	A B	10 10	0 0	10 minutes
Pasteurella multocida (ATCC 7707)	A B	10 10	0 0	10 minutes
Proteus mirabilis (ATCC 9921)	A B	10 10	0 0	10 minutes
Proteus mirabilis (ATCC 25933)	A B	10 10	0 0	10 minutes
Proteus vulgaris (ATCC 13315)	A B	10 10	0 0	10 minutes





## AIRCRAFT CLEANERS & DISINFECTANTS

**CALLA® 1452**



Page 9 of 11

*Product description:*  
**NEUTRAL DISINFECTANT CLEANER**

**DISINFECTION DATA:**

Test Organism	No. of Carriers			
	Sample	Exposed	Positive	Contact Time
Pseudomonas aeruginosa PRD-10 (ATCC 15442)	A	60	0	10 minutes
	B	60	0	
	C	60	1	
Salmonella enterica subsp. enterica serotype choleraesuis (ATCC 10708)	A	60	0	10 minutes
	B	60	0	
	C	60	1	
Salmonella enterica subsp. enterica serotype paratyphi B (ATCC 8759)	A	10	0	10 minutes
	B	10	0	
Salmonella enterica subsp. enterica serotype pullorum (ATCC 9120)	A	10	0	10 minutes
	B	10	0	
Salmonella enterica subsp. enterica serotype typhi (ATCC 6539)	A	10	0	10 minutes
	B	10	0	
Salmonella enterica subsp. enterica serotype typhimurium (ATCC 14028)	A	10	0	10 minutes
	B	10	0	
Salmonella enteritidis subsp. Enterica serotype enteritidis (ATCC 13076)	A	10	0	10 minutes
	B	10	0	
Serratia marcescens (ATCC 8100)	A	10	0	10 minutes
	B	10	0	
Shigella dysenteriae (ATCC 12180)	A	10	0	10 minutes
	B	10	0	
Shigella flexneri Type 2b (ATCC 12022)	A	10	0	10 minutes
	B	10	0	
Shigella sonnei (ATCC 25931)	A	10	0	10 minutes
	B	10	0	
Staphylococcus aureus (ATCC 6538)	A	60	1	10 minutes
	B	60	1	
	C	60	1	
Staphylococcus aureus subsp. aureus (ATCC 33592)	A	10	0	10 minutes
	B	10	0	
Staphylococcus aureus (clinical isolate)	A	10	0	10 minutes
	B	10	0	
Staphylococcus epidermidis (ATCC 29641)	A	10	0	10 minutes
	B	10	0	



## AIRCRAFT CLEANERS & DISINFECTANTS

**CALLA® 1452**



### Product description: **NEUTRAL DISINFECTANT CLEANER**

#### DISINFECTION DATA:

Test Organism	No. of Carriers			
	Sample	Exposed	Positive	Contact Time
Staphylococcus epidermidis (clinical isolate)	A	10	0	10 minutes
	B	10	0	
Streptococcus pyogenes Group A (ATCC 19615)	A	10	0	10 minutes
	B	10	0	
Streptococcus pyogenes (clinical-flesh eating strain, BIRD M3)	A	10	0	10 minutes
	B	10	0	
Tobramycin resistant Acinetobacter baumannii (clinical isolate-Fairfax Hospital CI 02001)	A	10	0	10 minutes
	B	10	0	
Vancomycin Resistant Enterococcus faecalis (VRE) (ATCC 51575)	A	10	0	10 minutes
	B	10	0	
Vancomycin Intermediate Resistant Staphylococcus aureus (VISA) (HIP-5836)	A	10	0	10 minutes
	B	10	0	
Xanthomonas maltophilia (clinical isolate)	A	10	0	10 minutes
	B	10	0	
Xanthomonas axonopodis pathovar citri @ a dilution ratio of 1:13.5 (2000 ppm active quaternary)	A	10	0	-
	B	10	0	

**Conclusions:** Under the conditions of this investigation, **Calla® 1452** demonstrated disinfectant activity against *Staphylococcus aureus*, *Salmonella (choleraesuis) enterica*, *Pseudomonas aeruginosa PRD-10*, *Ampicillin resistant Acinetobacter baumannii*, *Bactrim resistant Acinetobacter baumannii*, *Bordetella bronchiseptica*, *Cefazolin resistant Acinetobacter baumannii*, *Ceftazidime resistant Acinetobacter baumannii*, *Ceftriaxone resistant Acinetobacter baumannii*, *Ciprofloxacin resistant Acinetobacter baumannii*, *Community Associated Methicillin Resistant Staphylococcus aureus (CAMRSA) (NRS 123, Genotype USA400)*, *Community Associated Methicillin Resistant Staphylococcus aureus (CA-MRSA) (NRS384, Genotype USA300)*, *Corynebacterium ammoniagenes*, *Enterobacter aerogenes*, *Enterobacter cloacae*, *Enterococcus faecalis*, *Escherichia coli*, *Fusobacterium necrophorum*, *Gentamicin resistant Acinetobacter baumannii*, *Levofloxacin resistant Acinetobacter baumannii*, *Klebsiella pneumonia subsp. pneumoniae*, *Lactobacillus casei subsp. rhamnosus*, *Listeria monocytogenes*, *Methicillin Resistant Staphylococcus aureus (MRSA)*, *Pasteurella multocida*, *Proteus mirabilis (ATCC 9921)*, *Proteus mirabilis (ATCC 25933)*, *Proteus vulgaris*, *Salmonella (paratyphi B) enterica*, *Salmonella (pullorum) enterica*, *Salmonella (typhi) enterica*, *Salmonella (typhimurium) enterica*, *Salmonella (enteritidis) enterica*, *Serratia marcescens*, *Shigella dysenteriae*, *Shigella flexneri Type 2b*, *Shigella sonnei*, *Staphylococcus aureus subsp. aureus*, *Staphylococcus epidermidis*, *Streptococcus pyogenes Group A*, *Streptococcus pyogenes (clinical flesh eating strain, BIRD M3)*, *Tobramycin resistant Acinetobacter baumannii*, *Vancomycin Resistant Enterococcus faecalis (VRE)*, *Vancomycin Intermediate Resistant Staphylococcus aureus (VISA)*, and *Xanthomonas maltophilia* according to criteria established by the U.S. Environmental Protection Agency for registration and labeling of a disinfectant product as a bactericide. At a dilution ratio of **1:13.5 (2000 ppm active quaternary)**, **Calla® 1452 RTU** demonstrated disinfectant activity against *Xanthomonas axonopodis pathovar citri (Citrus Canker Disease)*.



## AIRCRAFT CLEANERS & DISINFECTANTS

**CALLA® 1452**



Page 11 of 11

### Product description: **NEUTRAL DISINFECTANT CLEANER**

#### FUNGICIDAL DATA:

**Test Method:** AOAC Fungicidal Activity of Disinfectants

**Test Conditions:** 5% organic soil load, 20°C (68°F) exposure temperature, 200 ppm hard water, and 4 fl oz/gal (118 ml/3.8L) dilution.

**Results:**

Test Organism	Sample	Exposure Time (min.) vs. Growth			
		5 Min	10 Min	15 Min	Contact Time
Trichophyton interdigitale (formerly mentagrophytes Trichophyton) (ATCC 9533) (Athletes Foot Fungus) (a cause of ringworm) (a cause of ringworm of the foot)	A	+	0	0	10 minutes
	B	+	0	0	
Candida albicans (ATCC 10231)	A	0	0	0	10 minutes
	B	0	0	0	

**Conclusions:** Under the conditions of this investigation, **Calla® 1452** demonstrated fungicidal activity against *Trichophyton mentagrophytes* and *Candida albicans*, according to criteria established by the U.S. Environmental Protection Agency for registration and labeling of a disinfectant product as a fungicide.

#### MILDEW FUNGISTATIC DATA:

**Test Method:** Hard Surface Mildew Fungistatic Test

**Test Organism:** *Aspergillus niger* (ATCC 6275)

**Test Conditions:** 400 ppm hard water, ceramic tile carriers, and 4 fl oz/gal (118 ml/3.8L) dilution.

**Contact Time For *Aspergillus niger* (ATCC 6275):** 10 minutes

**Results:**

Sample	No. of Exposed Tiles	No. of Tiles Showing Growth
A	10	0
B	10	0
Control	10	10

**Conclusion:** Under the conditions of this investigation, **Calla® 1452** demonstrated fungistatic activity against *Aspergillus niger*, according to criteria established by the U.S. Environmental Protection Agency for registration and labeling of a disinfectant product as a fungistat.