

# **NOVIRUCLEAN**

347*°* 

Concentrated Disinfectant Cleaner & Deodorant



# **DESCRIPTION**

**NOVIRUCLEAN** is an ultra-broad spectrum **Bactericidal**, **Yeasticidal** and **Viricidal** spray & wipe disinfectant cleaner, that is effective against the most common disease-causing organisms often found in public transports, public areas and hospitals ie:, Flu, influenza A, H1N1, SARS, MERS, Coronavirus.

**NOVIRUCLEAN** effectively cleans, deodorizes and disinfects all hard surfaces reducing contamination by bacteria, yeast and Virus.

## **APPLICATIONS**













**NOVIRUCLEAN** is a 3-way action which effectively cleans, disinfects and deodorizes all inanimate, hard and non-porous surfaces such as stainless, laminates, aluminum and plastics, metal.

**NOVIRUCLEAN** is recommended for cleaning & disinfection of public transports ie: trains, bus, taxi, aircraft cabins surfaces, holding bars, seats, armrests, tray tables, seatback pockets, overhead compartments, crew rest area, control panels, telephones, waste bins, galleys, lavatory, waste tank, floors, walls, doors, panels; general public areas i.e.: schools, office buildings, factories, gyms, cinemas, hotels, restaurants, hospitals & clinics etc.

## **PRODUCT BENEFITS**

- 3-way action: Cleans, Deodorizes and Disinfects.
- Aircraft approved disinfectant.
- Bactericidal against gram± strains.
- Viricidal against all enveloped Virus & non-enveloped Virus (Adenovirus, Norovirus, Rotovirus).
- No EDTA, no aldehyde.
- Does not stain cabin interiors and plastics.
- Effective in hard or soft, hot and cold waters.
- Powerful cleaning action can be diluted up to 1:200 with water.
- Operator friendly thanks to low irritancy and mild apple fragrance.
- Complies with European Biocides Regulation n°528/2012.
- Economical

## **PHYSICAL PROPERTIES**

Appearance	Liquid
Colour	
Odour	Green Apple
	8.4 – 8.8 (neat product)
Flash Point	

The ORAPI Group designs, manufactures and markets, Technica Solutions for Professional Hygiene and Industrial Maintenance. Th Group is listed on NYSE Euronext and represented in over 15 countries. ORAPI is certified ISO 9001 and 14001.



## **APPROVALS / CONFORMANCES**

- AMS 1453 (solution 1:30), Disinfectant cleaner for aircraft interiors (general purpose liquid).
- AMS 1453A (solution 1:30), Disinfectant cleaner for aircraft interiors (general purpose liquid).
- Boeing D6-7127 Rev P, Cleaning & disinfection of Commercial aircrafts category Disinfectants.
- Boeing BSS7434, Chemical Compatibility of Cleaning Products & Interior parts/Materials of Commercial Transport Aircraft.
- Bombardier: interior grooming and disinfection.
- Royal Canadian Air Force : Aircraft Sanitation & Disinfection for COVID-19.
- EU Biocides Regulation n°528/2012 (applicable 1st September 2013)







## **MICROBIOLOGIC ACTIVITIES**

#### **EN 1276:2019 – 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. **log**<sub>10</sub>

Test Organisms	ATCC No.	Organic Load (3.0 g/L bovine albumin)	Concentration	Exposed Time @ 20°C	Titer Reduction log <sub>10</sub> (Efficacy %)
Staphylococcus aureus	ATCC 6538	Dirty Condition	0.5%	5 minutes	≥ 5.55 (99.999%)
Enterococcus hirae	ATCC 10541	Dirty Condition	0.5%	5 minutes	≥ 5.21 (99.999%)
Escherichia coli	ATCC 10536	Dirty Condition	0.5%	5 minutes	≥ 5.44 (99.999%)
Pseudomonas aeruginosa	ATCC 15442	Dirty Condition	0.5%	5 minutes	≥ 5.55 (99.999%)

#### EN 1650:2019 - Yeasticidal (phase 2, step 1)

"Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of fungicidal or yeasticidal activity of chemical disinfectants and antiseptics used in food, industrial, domestic and institutional areas – Test method and requirements

Test Organisms	ATCC No.	Organic Load (3.0 g/L bovine albumin)	Concentration	Exposed Time @ 20°C	Titer Reduction log₁₀ (Efficacy %)
Candida albicans	ATCC 10231	Dirty Condition	0.5%	15 minutes	≥ 4.18 (99.99)

## EN 13697:2019 - Bacteridical & Yeasticidal (Phase 2, Step 2 : Test Method without Mechanical Action)

"Chemical disinfectants and antiseptics - "Quantitative Non-Porous Surface Test for the Evaluation of Bactericidal and/or Fungicidal Activity of Chemical Disinfectants 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 log₁₀ (Efficacy %)
Staphylococcus aureus	ATCC 6538	Dirty Condition	1.0%	15 minutes	≥ 6.44 (99.9999%)
Enterococcus hirae	ATCC 10541	Dirty Condition	1.0%	15 minutes	≥ 6.59 (99.9999%)
Escherichia coli	ATCC 10536	Dirty Condition	1.0%	15 minutes	≥ 6.78 (99.9999%)
Pseudomonas aeruginosa	ATCC 15442	Dirty Condition	1.0%	15 minutes	≥ 4.42 (99.99%)
Candida albicans	ATCC 10231	Dirty Condition	0.5%	15 minutes	≥ 3.28 (99.9%)

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## Conclusion - Bacteridical & Yeasticidal

Based on the above results and according to EN 1276:2019 and EN 13697:2019 NOVIRUCLEAN demonstrates Bacteridical activities at 1.0%:

Gram- Strain	Gram+ Strain
Acinetobacter baumanni	Enterococcus Hirae
Burkholderia cepacia	Methicillin resistant Staphylococcus aureus (MRSA)
Enterbacteriaceae (Carbapenem resistant) Klebsiella & E. Coli (CRE)	Staphylococcus aureus subsp. aureus
Escherichia coli (O157:H7)	Streptococcus (PSWRP)
ESBL producing Klebsiella and E. coli	Vancomycin resistant Enterococci (VRE)
Klebsiella pneumoniae	Vancomycin Intermediate Resistant Staph aureus (VISA)
Pseudomonas aeruginosa	Vancomycin resistant Staph aureus (VRSA)
Salmonella Typhimurium & Salmonella Enterica Subsp.	
Enterica	
Serratia marcescens	
Shigella dysenteriae	
Stenotrophomonas	

Based on the above results and according to EN 1650:2019 and EN 13697:2019 NOVIRUCLEAN demonstrates Yeasticidal activities at 0.5%:

Candiada Albican	
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## EN 14476+A2 :2019 - Viricidal (Phase 2, Step 1)

Chemical disinfectants and antiseptics - "Quantitative suspension test for the evaluation of virucidal activity in the medical area

Test Organisms	ATCC No.	Organic Load (3.0 g/L BSA + 3 mL/L sheep erythrocytes	Concentration	Exposed Time @ 30°C	Titer Reduction log <sub>10</sub> (Efficacy %)
Human Coronavirus <sup>1</sup> (strain 229 E)	ATCC VR-740	Dirty Condition	2.8% (1:35)	10 minutes	≥ 4.25 (99.99%)
Murine Norovirus (strain S99)	ATCC TIB-71	Dirty Condition	2.8% (1:35)	10 minutes	≥ 4.12 (99.99%)
Human Adenovirus type 5, (adenoid strain 75)	ATCC VR-5	Dirty Condition	3.3% (1:30) <sup>2</sup>	10 minutes	≥ 4.37 (99.99%)

<sup>&</sup>lt;sup>1</sup> Human Coronavirus (229 E strain), genetically close to the SARS-CoV-2 (COVID-19),

#### Conclusion - Viricidal

Based on the above results and according to EN 14476+A2 (2019) and ANSES (French Agency for Food, Environmental and Occupational Health & Safety) NOVIRUCLEAN demonstrates viricidal activities on:

All Enveloped Virus: (at concentration 3.3% following a 10 minutes exposure time at 30°C)

Bovine Viral Diarrhea Virus (BVDV)	Bovine Rhinotracheitis	Canine Distemper Virus
Coronavirus : MERS, SARS-Cov1, SARS-CoV2 (COVID-19)	Ebolavirus	Feline Picornavirus







Hepatitis B Virus (HBV)	Hepatitis C Virus (HCV)	Herpes Simplex Type 1 & Type 2
Human Immunodeficiency Virus (HIV-1) / (HIV-2)	Influenza Avian Influenza A (H1N1), (H2N2), (H3N2), (H3N2), (H5N1), (H9N2)	Paramyxovirus (Mumps)
Pertussi Virus (Bordetella pertussis)( (Whooping cough)	Porcine Respiratory & Reproductive Syndrome Virus (PRRSV)	Rabies Virus
Respiratory Syncytial Virus (RSV)		

Non-enveloped Virus: (at concentration 3.3% following a 10 minutes exposure time at 30°C)

	Adenovirus	Norovirus	Rotavirus
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## **DIRECTION FOR USE**

# Spray and Wipe application:

#### For general cleaning:

**NOVIRUCLEAN** may be used between 1:30 to 1:200. Apply the solution on inanimate, hard, and non-porous surfaces 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. **NOVIRUCLEAN** easily removes marks, smudges, light soils and fingerprints.

#### For disinfection:

Use **NOVIRUCLEAN** at 1:30 and allow a contact time of at least 10 minutes. Simply spray to be cleaned and wipe off with a clean cloth. No preparation of the surface is necessary.

## For fungicidal Activity:

Use **NOVIRUCLEAN** at 1:200 this product is fungicidal against pathogenic fungi, such as 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 15 minutes. Remove the excess liquid after 15 minutes.

#### In toilet cleaning:

Thoroughly wet the surfaces with **NOVIRUCLEAN**, diluted between 1:10 and 1:30. Allow the surface to soak 30 minutes then wipe dry with a clean cloth or rinse with fresh water.

## **Bath Application:**

Dilute **NOVIRUCLEAN** 1 part to 10 parts of water. Soak disassembled components for 60 minutes or until soil is loosened or removed. Remove parts from bath, brush free any adhering soil then rinse with fresh water, using a hose or high-pressure water gun.

# **Fogging Application:**

- Use a ULV atomist fogger (preferable particle size 5 20 microns ie : Space Generator No 0014).
- Dilute NOVIRUCLEAN 1 part to 30 parts of water.
- Fill the fogger's tank.
- Atomise after every flight inside the cabin, in the air on all surfaces, including the ceiling, seats, trays, floors, lavatories, crew rest areas, and galleys.





## MATERIALS OF CONSTRUCTION COMPATABILITY

Safe for use on all materials used in the construction of aircraft and aircraft toilets, both re-circulating and vacuum type.

# **STORAGE & SAFETY**

Two year in original packaging in a cool and dry place. **NON-HAZARDOUS.** Avoid contact with eyes and skin. Wear safety glasses if splashing is likely to occur. Wear rubber gloves if prolonged skin contact is expected. **Product reserved for professional use only. Use biocides with caution.** 

For further information please refer to the Safety Data Sheet.

# **PACKAGING**

## **WARRANTY**

The information contained herein is presented without guarantee or warranty and the Seller disclaims any liability incurred from the use thereof. Nothing contained herein is to be construed as a recommendation for any use in a commercial process not controlled by the Seller, nor for a use which is in violation of any existing patent, foreign or domestic, or of applicable laws and regulations. THE SELLER MARKS NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, EXCEPT AS EXPRESSLY STATED IN SELLER'S SALES CONTRACT OR SALES ACKNOWLEDGEMENT FORM.

