

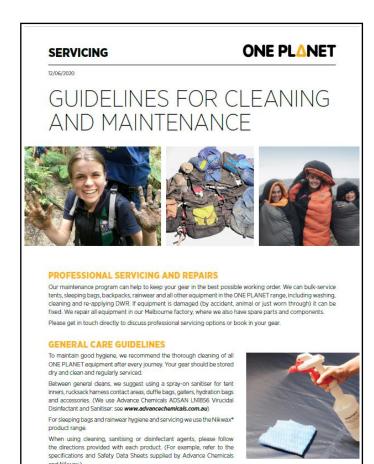
ONE PLANET - Guidelines for maintaining equipment - 2020

ONE PLANET developments in equipment - Engaging physical distancing



Equipment hygiene has become an essential part of risk management for schools and institutions in 2020, especially for outdoor gear that may be used by multiple users within a short time frame.

Our Guidelines for Cleaning, Sanitising and Disinfecting document provides advice and best practice guidelines for risk management in 2020.





### **KEY DEFINITIONS**

Cleaning: to free from dirt or contaminants

(Cleaning products are used to remove germs, dirt, and other organic material by washing them away)

Sanitising: ridding a surface of contaminants and killing germs

**Disinfecting**: to free from infection especially by destroying harmful microorganisms.

- Key attributes of disinfectants are:
  - what is it effective against (which types of bacteria, viruses and other microorganisms)
  - the dwell time (how long it takes to kill and achieve a 6-log (99.9999%)) reduction in micro-organisms

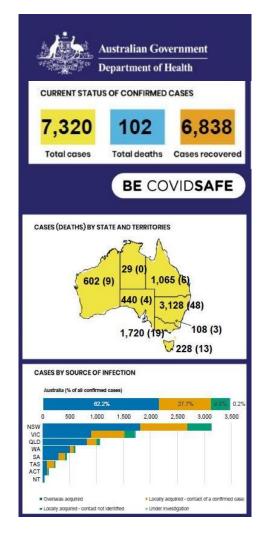




### What is the Risk and Concern in 2020?

The potential of infection and viral spread via 'contact with droplets from an infected person's cough or sneeze'.\*

And that these droplets may remain on outdoor gear and equipment between users.



<sup>\*</sup> www.health.gov.au/news/health-alerts/novel-coronavirus-2019-ncov-health-alert/what-you-need-to-know-about-coronavirus-covid-19#what-is-covid-19



### How do we know about this risk?

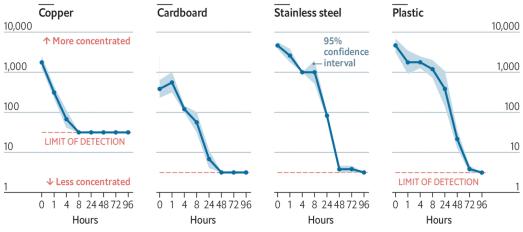
Research published in *The New England Journal of Medicine* on 16 April 2020 found that SARS-CoV-2 can survive for hours – and in some cases, days – outside a host, depending on the surface.<sup>†</sup>

Under experimental conditions, it found

- the virus remained viable in air for the entire three-hour experiment.
- It could still be detected on the stainless steel and plastic surfaces up to 72 hours later.

NOTE: Textiles were note tested in this experiment

Concentration of viable SARS-Cov-2 virus in a sample, TCID<sub>50</sub>\* per litre of air, log scale



Source: "Aerosol and Surface Stability of SARS-CoV-2 as Compared with SARS-CoV-1" by Doremalen, Bushmaker & Morris, New England Journal of Medicine

\*Tissue-culture infectious dose

The Economist



### How can we Manage Risk?

To maintain good hygiene, and for the longevity of equipment we recommend the thorough cleaning of all ONE PLANET gear after every journey.

Your gear should be stored dry and clean and regularly serviced.

To manage risk: Servicing may include the use of a sanitiser and/or disinfectant

### What are the key challenges?

- 1) ONE PLANET Equipment is manufactured from a wide variety of materials and components. Including.
- Coated and uncoated surfaces and textiles
- Of porous and non-porous nature
- 2) Schools and institutions may be time poor, gear may need to be cleaned and servicing during journeys or with fast turn around.

#### SERVICING

### ONE PLANET

### GUIDELINES FOR CLEANING AND MAINTENANCE







#### PROFESSIONAL SERVICING AND REPAIR

Our maintenance program can nept to keep your gear in the best possible working offer, we can equit service (washing, -cleaning, re-applying DWH) and more) - lents, -sleeping bags, -backpacks, rainwoor and all other equipment in the ONE PLANET range\_If equipment is damaged (by accident, animal or just worn through) it can be fixed. We repair all equipment in our Melbourne factory, where we also have spare parts and components.

#### GENERAL CARE CUIDELINES

To maintain good hygiene, we recommend the thorough cleaning of all ONE PLANET equipment after every journey. Your gear should be stored dry and clean and regularly serviced.

Between general cleaning, we suggest we suggest using a spray on sanitiser for tent inners, nucksack harnesg and contact areas, duffle bags, gaiters, hydration bags and accessories. (We use Advance Chemicals ADSAN LNI856 Virucidal Disinfectant and Sanitiser, www.advancechemicals.com.au):

For sleeping bags and rainwear hygiene and servicing we use the Nikwax<sup>a</sup> product range.

When using cleaning, sanitising or disinfectant agents please follow the directions for use provided on the specification and Safety Data Sheet's (e.g. Advance Chemicals or Nikwax).





### Advance Chemicals ADSAN LN1856 Virucidal Disinfectant

### What is ADSAN LN1856 and what how effective is it?

- A ready-to-use virucidal disinfectant
- Effective on both non-porous and porous surfaces.
- A quaternary ammonium compound (QAC) disinfectant.
- Proven to Kill a broad spectrum of micro-organisms including bacteria, viruses, yeasts, moulds, fungi and algae with a log 6 reduction (99.9999%)





How do we know ADSAN LN1856 is effective?

ADSAN LN1856 is modelled on a ready-to-use, quaternary ammonium disinfectants listed by the United States Environmental Protection Agency (EPA) in List N.

List N - are registered products claiming virucidal kill and for use against SARS-CoV-2 the virus that causes COVID-19.

www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2-covid-19

Disinfectants on List N have not been tested specifically against SARS-CoV-2 the EPA expects them to kill the virus because they:

- Demonstrate effectiveness against a harder-to-kill virus: or
- Demonstrate effectiveness against another type of human coronavirus eg, MERS-CoV, SARS CoV







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#### **ADSAN LN1856**

07-05-2020

#### Virucidal Disinfectant and Sanitiser

Kills 99 9% of bacteria and germs

ADSAN LN1856 is a ready to use sanitiser for sanitising both non porous surfaces such as benches, tables, chairs, equipment, floors and walls. It can also be used on porous surfaces such as fabric. It is based on patented technology using a blend of specialised quaternary ammonium disinfectants.

ADSAN LN1856 will kill a broad spectrum of micro-organisms including bacteria, viruses, yeasts, moulds, fungi and algae. It can be used in the food industry to clean light soil and sanitise non food prep surfaces such as benches and equipment. It can be used in rooms and in motor vehicles. It is unperfumed so as not to taint foodstuffs, It helps control moulds and odours.

ADSAN LM1856 can be applied by spray, wiping or immersion. It will tolerate a light soil load without losing its effectiveness. It is corrosion safe on all metal and painted surfaces and will not harm plastics or fabric. It is odourless and pleasant to use. It has very low irritatecy on skin.

#### CHEMICAL AND PHYSICAL PROPERTIES

Appearance: Clear colourless liquid Flash Point: Non-flammable Odour: Almost none Specific Gravity: 1.0 8 – 9.8 Foam Characteristics: Low

#### DIRECTIONS FOR USE

Light Soil: Spray on and wipe off or leave to dry.

Gross soil: Clean away gross soil before sanitising. Any surfaces holding liquid must be drained and any collection of liquid removed before contact with food. Spray on, leave 1 to 2 minutes and wipe off.

ADSAN LN1856 can also be used neat by immersion. Immerse neat for 1 – 5 minutes then remove and allow to dry.

#### Efficacy

ADSAN LN1856 contains a dual quaternary ammonium synergistic disinfectant system to kill a wide range of microbes including viruses as detailed below.

Bacteria: Published data of a comparable formulation using the Use-Dilution Confirmation Tests, modified, in accordance with the A.O.A.C. Manual, 12th Edition, 1975 pages 56-60 showed no survivors when tested against the following bacteria.

Gram negative bacteria: Pseudomonas aeruginosa, Salmonella choleraesuis, Enterobacter cloacae, Klebsiella pneumoniae, Proteus mirabilis, Shigella flexneri, Enterobacter aerogenes, Serratia marcescens, Proteus vulgaris, Shigella sonnel.

Gram-Positive Organisms Staphylococcus aureus, Staphylococcus aureus phage 80, Staphylococcus aureus phage 81, Streptococcus pyogenes, Staphylococcus epidermidis.

The germicidal and detergent sanitizer activity of the above formulation was illustrated by conducting A.O.A.C. Germicidal and Detergent Sanitizer tests, modified in accordance with the A.O.A.C. Manual, 13th Edition, 1980. Results are listed below.



Why a quaternary ammonium compound (QAC) disinfectant over other options?

Hypochlorite or chlorine bleach (eg, White King bleach)

- Is very effective at killing microorganisms at high concentrations.
- But very harsh and is likely to cause damage to the gear.
- Dangerous if not used correctly

Hydrogen peroxide and/or "peroxy" compounds including perborates and percarbonates (eg, Sard and/or Vanish powders)

- These are effective at killing microorganisms and safer to use than chlorine bleach
- But once diluted and ready for use have a limited useful lifetime

Alcohols - methanol, ethanol, isopropanol (eg, methylated spirits)

- Can be effective at killing micro-organisms
- But they need to be of sufficiently high concentration to be effective and evaporate quickly becoming less effective as the alcohol evaporates.
- Flammable



### ADSAN LN1856 Virucidal Disinfectant and Sanitiser is a good choice

- Quaternary ammonium compound disinfectants are generally used as food grade sanitiser's and may already be in use within your institution (eg canteen/gym etc.)
- Applied via spray (leave for 2 minutes)
- Applied via immersion (leave 1 to 5 minutes)
   Easy to use
- Tolerates a light soil load without losing effectiveness.
- Will not harm plastics or fabric, Is corrosion-safe on all metals
- Effective on non-porous and porous surfaces
   Ideal for use on outdoor equipment
- ADSAN LN1856 is Australian made and can be sourced in bulk quantities, it has a long and stable shelf life.
- It is, low odour, low irritancy and non-flammable
   Safe and simple to use with young people





We have tested ADSAN LN1856 on ONE PLANET products:

Its safe to use whilst maintaining equipment performance

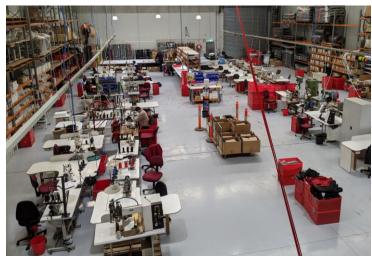
- Rucksacks and Duffels Waterloc Canvas and Cordura including the harness
- Tents & Flies Wurley Outdoor Ed range, and Goondie series
- Gaiters
- Waterloc Canvas and Nylon Accessories

### Our testing method

- involved submerging materials and components in concentrate ADSAN LN1856 for 72 hours before letting the materials dry naturally
- We then test performance characteristics against our quality control standards
- We then repeat daily with a spray application and performance testing to simulate long term washing

We are continuing to test and monitor







Our aim is to provide quality equipment that lasts whilst keeping kids safe and making life easy for teachers and leaders.

# How can we integrate servicing and disinfecting into our cleaning practices?

- Backpacks
- Tents and fly's
- Gaiters
- Accessories

To maintain hygiene with we suggest;

- Simply spray on ADSAN LN1856 Virucidal Disinfectant
- Either in the field or gear shed
- Leaving to dry in open air







Our aim is to provide quality equipment that lasts whilst keeping kids safe and making life easy for teachers and leaders.

How can we integrate servicing and disinfecting into our cleaning practices?

- Sleeping Bags (Down and Synthetic)
- Rainwear (3-Layer Membrane over pants and jackets)

To maintain hygiene with simplicity we suggest;

Using the range of Nikwax Products during your washing cycles.

- Nikwax Tech Wash
- Nikwax TX Direct
- Nikwax Down Wash
- Nikwax Down proof (to re apply DWR)

Currently: we are testing the use of ADSAN LN1856 Virucidal Disinfectant as both a concentrated wash in agent and with spray application







Our aim is to provide quality equipment that lasts whilst keeping kids safe and making life easy for teachers and leaders.

# How can we integrate servicing and disinfecting into our cleaning practices?

- Hand wash Bags and Dribblers

To maintain hygiene we suggest;

- Remove Bladder inserts wash and clean in hot soapy water
- Simply spray on ADSAN LN1856 Virucidal Disinfectant on the exterior and dribbler.





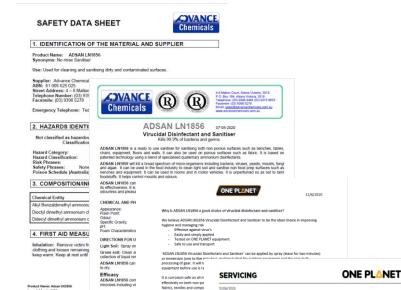


We believe ADSAN LN1856 Virucidal Disinfectant and Sanitiser to be the ideal choice in improving hygiene and managing risk

- Effective against virus's
- Easily and simply applied
- Tested on ONE PLANET equipment
- Safe to use and transport

Refer to www.oneplanet.com.au and the SharePoint for

- ONE PLANET Guidelines for Maintaining equipment 2020 Covid-19 Pandemic
- 2. ONE PLANET Understanding best practice for maintaining outdoor equipment in 2020
- 3. ADSAN LN1856 Virucidal Disinfectant and Sanitiser information sheet
- 4. ADSAN LN1856 Virucidal Disinfectant and Sanitiser Safety Data Sheet
- 5. Information and safety document for health professionals



simple to use, with the use also non-flammable and lo

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PROFESSIONAL SERVICING AND REPAIR

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**GUIDELINES FOR CLEANING** 

AND MAINTENANCE

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### New developments in equipment - Engaging Physical distancing

In 2020 our focus pivoted early towards

- 1. Maintaining a safe working environment for our Melbourne factory, Office, despatch and Melbourne shop
- 2. Researched, developed, tested new cleaning, sanitising and disinfecting practices
- 3. Problem solving physical distancing challenges for schools and institutions.
  - We've developed a Wurley 3 Tent divider
  - Expanded our Hire fleet







## New developments in equipment - Engaging social distancing

### Wurley 3 Tent Divider

We can retrofit a physical distancing divider into Wurley 3 tents

- Converts a Wurley 3 into physically distanced space for two
- The full scale divider is sewn diagonally into the top binding
- Coated Nylon provides vapour barrier between young people
- Easily removeable at a later date







www.oneplanet.com.au/outdoor-education-home <a href="mailto:sales@oneplanet.com.au">sales@oneplanet.com.au</a>