

### Understanding best practices for maintaining outdoor equipment in 2020

In 2020, equipment hygiene has become an essential part of risk management for schools and institutions where gear and equipment may be used by multiple users within a short time frame.

At ONE PLANET, our aim is to provide quality equipment that lasts whilst keeping kids safe and making life easy for teachers and leaders.

Please refer to our 'Guidelines for Cleaning and Maintenance' document for instructions and recommended steps for gear and equipment maintenance and hygiene.



Further information can be found at [www.oneplanet.com.au/outdoor-education-home](http://www.oneplanet.com.au/outdoor-education-home), or get in touch directly via [sales@oneplanet.com.au](mailto:sales@oneplanet.com.au) or on the phone: (03) 9311 5244.

#### KEY DEFINITIONS

**Cleaning** – the process of removing unwanted substances, such as dirt, microbes, and other contaminants from an object or surface.

**Sanitising** – the process of ridding a surface of contaminants that could affect your health. Sanitising is meant to reduce the quantity and growth of bacteria, viruses and fungi on a surface and is typically done on food preparation surfaces.

**Disinfecting** – the process of “killing” the microscopic organisms thereby reducing the risk of spreading infection. Cleaning should precede disinfecting.

**Disinfectants** – Disinfectants are antimicrobial agents that are designed to inactivate or destroy microorganisms on inert surfaces. Disinfectants work by destroying the cell wall of microbes or interfering with their metabolism. They are rigorously tested for the claims made on the product label. Key is what it is effective against (what types of bacteria, viruses or fungi) and how long it takes (dwell time) to kill them to achieve a 6-Log reduction (99.9999%). Each type of disinfectant has its own advantages and disadvantages.



## RISK & CONCERN in 2020

In 2020, there is concern with Coronavirus (AKA SARS-COV-2 or Coronavirus disease or COVID-19) and the spread of infection. The length of time that SARS-COV-2 survives on inanimate surfaces will vary depending on factors such as the amount of contaminated body fluid, environmental temperature and humidity.

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

These droplets may exist on outdoor gear and equipment between users.

Research published in *The New England Journal of Medicine* [www.nejm.org/doi/10.1056/NEJMc2004973](http://www.nejm.org/doi/10.1056/NEJMc2004973) † found that SARS-CoV-2 can survive for hours and in some cases days, outside a host, depending on the type of surface it is on.

The study looked at the stability of the virus in air and on plastic, stainless steel, copper, and cardboard surfaces. ‡

Under experimental conditions, it found:

- The virus remained viable in air for the entire three-hour experiment.
- It was more stable on plastic and stainless-steel surfaces than on either copper or cardboard.
- There wasn't any viable SARS-CoV-2 detected on the copper surface after four hours or on the cardboard after 24 hours, while it could still be detected on the stainless steel and plastic surfaces up to 72 hours later.
- Note: textiles were not tested in this study.

In relation to outdoor gear, ONE PLANET is conscious of the stability of viruses living on equipment and spreading infection between users.

Equipment in the ONE PLANET range is manufactured from a variety of textiles, foams, components, and trimmings. Including hard surfaces and textiles coated and uncoated, of both porous and non-porous natures.

## REFERENCE

\* *What you need to know about coronavirus (COVID-19)*. (2020, April 30). Australian Government Department of Health. <https://www.health.gov.au/news/health-alerts/novel-coronavirus-2019-ncov-health-alert/what-you-need-to-know-about-coronavirus-covid-19#what-is-covid19>

† Dr. van Doremalen, Trenton Bushmaker, & Dylan H. Morris. (2020, March 17). *Aerosol and surface stability of SARS-Cov-2 as compared with SARS-Cov-1* | *NEJM*. New England Journal of Medicine. <https://www.nejm.org/doi/10.1056/NEJMc2004973> ‡ Suzannah Lyons. (2020, March 22).

‡ *How long coronavirus lasts on surfaces*. ABC (Australian Broadcasting Corporation). <https://www.abc.net.au/news/science/2020-03-20/how-long-does-coronavirus-last-on-surfaces/12074330>



## MANAGING RISK

To maintain good hygiene of equipment, 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 thorough cleaning at the end of each journey, we recommend frequently cleaning surfaces that are touched or shared and suggest using a spray on sanitiser and disinfectant for tent inners, rucksack harness and contact areas, duffle bags, gaiters, hydration bags and accessories.

During servicing, as a step towards disinfecting, we suggest the use of Advance Chemicals ADSAN LN1856 Virucidal Disinfectant and sanitiser. *Please refer to the Advance Chemicals ADSAN LN1856 Virucidal Disinfectant and sanitiser documentation and associated Safety Data Sheet for specifics.*

Please note, whilst we use suggest the use of Advance Chemicals products, any similar disinfectant, cleaning and sanitiser of products of the corresponding standard and type may also be used, provided that the consumer follows the directions for use and specifications provided in connection with the product.

### What is ADSAN LN1856 and what is its efficacy?

ADSAN LN1856 is a ready to use sanitiser for use sanitising both nonporous surfaces and porous surfaces. It is based on patented technology using a blend of specialised quaternary ammonium disinfectants. *(Please refer to 'ADSAN LN1856 Virucidal Disinfectant and Sanitiser' information sheet for information about efficacy).*

ADSAN LN1856 is modelled on a ready to use surface disinfecting spray that is listed by the US EPA (United States Environmental Protection Agency) in a list of registered products of manufacturers claiming viricidal kill. This virus is in the same family as COVID-19 and is described as a surrogate virus to COVID-19.

This information is obtained from Advance Chemicals ADSAN LN1856 information sheet, which accompanies this document. ONE PLANET makes no representation or warranties as to the accuracy of this information or the effectiveness of the ADSAN LN 1856 products. No manufacturer has yet claimed kill against COVID-19. [www.epa.gov/coronavirus/how-does-epa-know-products-list-n-work-sars-cov-2](http://www.epa.gov/coronavirus/how-does-epa-know-products-list-n-work-sars-cov-2)

### Benefits of ADSAN LN1856 Virucidal Disinfectant and sanitiser

We believe ADSAN LN1856 to be an ideal choice in improving hygiene and managing risk as it is:

- Effective against viruses.
- Easy and simple to apply.
- Tested on ONE PLANET equipment.
- Safe to use and transport.

### ADSAN LN1856:

- Can be applied by spray (leave for two minutes) or immersion (one to five minutes).
  - o Ideal for outdoor equipment and the easy bulk-processing of gear.
- Will tolerate a light soil load without losing its effectiveness.
  - o We recommend cleaning your equipment first, especially if items are heavily soiled.
- Works effectively on both non-porous and porous surfaces.
  - o Ideal for outdoor equipment with its range of fabrics, textiles, and componentry.
- Will not harm plastics or fabric and is corrosion-safe on all metal and painted surfaces.
  - o Ideal for outdoor equipment.
- Has low skin irritancy. The use of safety goggles and gloves is recommended by Advance Chemicals.
  - o Safe for young people to use.
- Is non-flammable and low in odour.
- Is Australian-made and can be sourced in bulk quantities.
- A similar QAC disinfectant is likely to be already in use within your institution, for example in the canteen or gym



### Using ADSAN LN1856 on ONE PLANET products.

We have tested ADSAN LN1856 on ONE PLANET products. It is safe to use on Rucksacks, Duffles, Tents, Flies, Gaiters, Rainwear and Accessories while maintaining the equipment's performance:

Our study was designed explicitly to test if the disinfectant is harmful to our products whilst simulating the washing and servicing after use by an individual in the outdoors. We cannot make any claims about its effectiveness against SARS-CoV-2. (Please refer to 'ADSAN LN1856 Virucidal Disinfectant and Sanitiser' information sheet for information about efficacy).

We've tested ADSAN LN1856 on ONE PLANET equipment for the equivalent of approximately 2 years of application whilst maintaining expected material quality and performance.

ONE PLANET has tested ADSAN LN1856 on rucksacks, duffles, tents, flies, gaiters, and accessories for the equivalent of 40 applications. Approximately two years' worth of use in a school setting at 5 camps per term.

### Methodology

- Materials and components submerged in concentrated ADSAN LN1856 for 72 hours.
  - o Materials allowed to dry naturally.
- Performance characteristics tested against our quality control standards.
- Regular reapplications of ADSAN LN1856 via immersion.
  - o Materials allowed to dry naturally.
- Performance characteristics tested periodically.

NOTE: Disinfectant solutions must always be prepared and used according to the manufacturer's instructions, including instructions to protect the safety and health of disinfection workers, use of personal protective equipment, and avoiding mixing different chemical disinfectants. ONE PLANET will not be responsible for any damage or loss of any nature resulting from use of or reliance on the information contained in this document or provided by third parties in connection with the products. No express or implied warranties are given other than those warranties that cannot be excluded by law.

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**DISCLAIMER** - These cleaning processes are recommended for the regular maintenance of your equipment and the health and safety of individuals using it. Prolonged regular use of sanitisers and harsh chemicals may shorten the life, change feel/texture or colour of some products. We are continuing to monitor and test the long term effects of regular use of ADSAN LN1856. ONE PLANET makes no claims towards the efficiency with which spray sanitisers reduce or remove micro organisms on the above products. Information is accurate at time of printing (July 2020) and is subject to change without notice. ONE PLANET will not be held responsible for any damage to equipment caused through regular servicing. ONE PLANET is not responsible for any loss/damage of any nature resulting from use of or reliance in these Guidelines. No express or implied warranties are given other than those warranties that cannot be excluded by law.