| \$SILVERSEA® | | ATP (ADENOSINE TRIPHOSPHATE) TESTING | | | |
|--|--|--------------------------------------|---------------|--|--|
| Effective Date 20/03/2021 | | Last Revise | Pages : 3of 3 | | |
| Issued by | Fleet Rooms Division | | | | |
| | Manager | | | | |
| Shipboard | All Shipboard Personnel | | | | |
| Shore-Side | Shore-Side SVP Hotel & SVP MARINE OPERATIONS | | | | |
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1 - Understanding ATP (ADENOSINE TRIPHOSPHATE)

ATP testing solutions work by capturing the molecule from a surface or water sample via a swab. To measure ATP, the sample is mixed with an enzyme from fireflies called luciferase, which catalyses a reaction where two of the phosphates are broken off from the ATP molecule

2 - How does ATP Testing work?

ATP on the surface can be collected using the Surface ATP Test Swab. Once the swab is activated, the ATP will then react with an enzyme and produce light. A luminometer will measure the light generated and report it as relative light units or RLUs.

3 - Performing an ATP test.

The swabs must be removed from the refrigerator and allowed to warm up for up to 10 minutes at room temperature before use. Label the swab by location & surface. Swab as per the illustrations below.



Remove presoaked swab from vile



Insert vile fully into

Do not let the swab touch anything other than the surface to be swapped



Rub a 10cm x 10cm square in a zig-zag multi directions using all sides of the swab



Push swab into the vile











After 10 seconds



Test results are stored in the 3M Hygiene

4 - ATP Testing Frequency.

ATP Testing shall take place at random times of day, random locations and during weekly Public Health inspections. Pre- Cleaning, Post- Cleaning and Deep Cleaning tests may be undertaken. As more tests are undertaken the data base is built and required standards are established. The results shall be recorded on the Clean-Trace Management system and shall be retained for a

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period of 12 months. The testing reports will be subjected to presentation for public health audits as required. Testing must take place within 4 hours of the swab. The vial must be labelled per location and swabbed item. If a hand swab is taken, a generic label can be used such a Butler female / Waiter male LT.

The following tests shall be undertaken by operational vessels on a monthly basis:

Dawn / Moon/ Muse / Spirit – 100 tests per month of various random areas of which 20% shall be hand swab tests.

Shadow / Whisper – 80 tests per monthof various random areas of which 20% shall be hand swab tests.

Cloud / Wind – 60 tests per month of various random areas of which 20% shall be hand swab tests.

Explorer – 50 tests per month of various random areas of which 20% shall be hand swab tests.

5 - ATP TESTING RESPONSIBILITY

The following persons shall be responsible for conducting ATP testing in their respective areas and will have access to the Clean - Trace Management Program.

- Hotel Director
- Chief Housekeeper / Butler Manager
- Food and Beverage Manager
- Infection Control Officer

The Infection Control Officer shall undertake ATP testing in any random areas and record the results in the Clean - Trace Management Program.

The Captain and Doctor shall have oversight to monitor the hygiene and sanitation of the vessel in particular during an outbreak.

6 - STORAGE OF TESTING SWABS

Swab packets and swabs must be kept stored in a refrigerator. Do not keep in a drawer, desk or freezer. Allow the swab to warm up for 10 minutes at room temperature prior to use.

^{*}Vessels in lay-up shall undertake 50% of their normal ATP testing requirements.

^{*}Vessels in dry/wet dock shall undertake testing after the docking period.

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The swab packets have a 12 month expirey date.

7 – WASTE DISPOSAL OF TESTING SWABS

Once the swab has been tested in the illuminomter the swab can be disposed of in it's vial and treated as regular plastic waste.

8 – CALIBRATION OF EQUIPMENT

All testing equipment shall undertake an annual calibration test by support of the manufacturer arranged through Sedisp. To monitor correct readings if in doubt, a Surface Postive Control test may be undertaken (see 3M Best Practice Guide).