

## Disinfecting the AccuFIT 9000 Fit Test Instrument

As a result of the current COVID-19 pandemic awareness, AccuTec-IHS has been requested to issue guidance on disinfectant procedures and hazard abatement with regard to the AccuFit 9000 device.

### Surface Disinfection

The USEPA has issued a list of compounds that are effective in disinfecting and sanitizing surfaces which may have been contaminated with viruses or other infectious organisms. The list can be found at [www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2](http://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2)

Three of these compounds are:

1. 2-propanol (isopropyl alcohol, isopropanol)
2. Hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) 3%
3. Sodium hypochlorite (NaOCl or 6% aqueous solution of household bleach).

The EPA list has other valuable information on the website, particularly concerning contact time of the disinfecting compound.

The three compounds listed above are readily available (2-propanol is the alcohol used by the AccuFIT 9000 in the CNC process), and hydrogen peroxide and household bleach can be found in any supermarket. All three have been tested on the polymer case and screen of the AccuFIT 9000 instrument, and none of them cause any appreciable damage. The device is not waterproof, however, so the disinfectants should be applied using a damp paper towel or clean cloth.

### Sample Tubes

An excellent study performed several years ago showed the impossibility of air being drawn into the test subject's breathing zone from the sample tube. Extensive testing showed that the flow rate into the fit tester is greater than inhalation can overcome. However, because the mask sample air is fairly humid, liquid water can form in the clear sample tube. We do recommend rinsing the sample tube with 2-3 ml of the 2-propanol after a series of fit tests or when the daily fit testing is completed. Be sure that the sample line is disconnected from the instrument before introducing the alcohol into the sample line. Do not allow liquid alcohol to enter into the sample ports of the instrument as this may damage the MAC valve, splitter valve, and internal filters.

### Exhaust Recontamination

Both the output from the CNC engine and the bypass air pass through a HEPA filter before being exhausted into the room air. HEPA filters are considered to be better than 99.97% efficient at removing particulates from the air passing through them. It is very unlikely that a virus particle or biomass containing the virions could penetrate these HEPA filters.