



## How to Sanitise Equipment and Surfaces

For concerns regarding appropriate sanitisation of shared equipment or surfaces please refer to the following standardised advice.

*This guidance note applies to all workplaces controlled by Curtin University.*

### 1. Sanitising surfaces and basic equipment:

#### Detergents/Soaps<sup>i</sup>

- This is your first and most readily available option.
- We have received professional medical advice that wiping down surfaces with solutions of detergent/soap are effective at killing COVID-19.
  - This is due to soap and detergent's ability to strip off the protective lipid shell from encapsulated viruses like Corona, causing them to die in ambient conditions.
  - Please note that common hand soap and dishwashing detergents are effective, they do not have to be the antibacterial variants.
  - Detergents and soaps also remove soils and other contaminants that would render disinfectants less effective.
  - This is also why regular hand washing with soap is the most effective personal protection.
- The above is appropriate with basic equipment also, as long as care is taken to not wet sensitive electronics. e.g. keyboards, computer mice, phones, etc.
- Detergent solutions should be prepared so that suds/bubbles are visible on application to the surface.

#### Alcohol wipes

- Can be used if available.

#### Hand Sanitiser

- Hand sanitiser is not recommended for equipment as it may leave residues from gelling agents.
- However an alternative approach is to have workers use hand washing or hand sanitiser following use of the equipment.

## 2. Using Alcohol solutions for sensitive equipment:

### Availability

- Direct alcohol rubbing (with either of the above solvents) should be reserved for special applications and circumstances. Detergent solution should be used for common surfaces as effective and readily available.
- Alcohol or alcohol solutions may be advisable for especially sensitive equipment (e.g. microscopes, cameras, etc) as it will leave nil residue.
- If you have equipment needing sanitisation via alcohol you are encouraged to approach your own School/Faculty for technical support to access alcohol stocks and to be instructed on appropriate handling.

### Alcohol Types

- **Ethanol** (synonyms: ethyl alcohol / absolute alcohol / denatured ethanol / denatured alcohol)
  - Must be used in concentrations of 60%vol and higher.<sup>ii</sup>
- Commonly used for cleaning electronics. Unlikely to strip off markings from equipment, but do test prior to full application.
- Denatured ethanol is still suitable but has additives to prevent human consumption.
- Pure ethanol is regulated. Teams managing pure ethanol will be required to keep accurate stock and dispensing records.
  - (refer section 21 of the [Chemical Management Plan](#))
- **Isopropyl alcohol** (synonyms **IPA** / rubbing alcohol / Propan-2-ol / 2-Propanol)
  - Must be used in concentrations of 70%vol and higher.<sup>iii</sup>
- Suitable for electronics. Take care of gaskets and rubber components which may be affected by IPA. Unlikely to strip off markings from equipment, but do test prior to full application.

### Precautions for alcohols:

- Both alcohols are highly volatile, and high flammable.
  - Before selecting alcohol ensure that you are not increasing the risk of the task to an unacceptable level.
  - Use in a well ventilated area.
  - Power off electrical equipment to prevent ignition.
  - To reduce the risk of flammability hold in containers that are as small as possible. 500mL is the maximum recommended, 100-250mL would be prudent.
  - Store only as much as needed in a room. It is recommended that offices and equipment store rooms maintain no more than 1L of alcohol solutions in various bottles per room.
  - Bottles must be labelled appropriately.

- (refer section 9.4 of the [Chemical Management Plan](#))
- If spraying as an aerosol ensure adequate ventilation and be especially careful of ignition sources.
- PPE is advisable as per the chemical's SDS.
- Ethanol and IPA to a lesser degree may affect your skin.
- If cleaning respirators ensure that carbon filter units are removed from the mask prior to cleaning.
- The alcohol will rapidly deplete any organic filter cartridges attached to a respirator mask.

### Application of alcohols:

- Application of alcohol can be as simple as wetting a paper towel / cloth with alcohol and rubbing on the equipment in question.
- Cloths can be reused if not visibly soiled. If soiled either wash with detergent or dispose as necessary.

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<sup>i</sup> **Environmental cleaning and disinfection principles for COVID-19**, Version 1 (10/03/2020), *Department of Health – Australian Government*, <https://www.health.gov.au/sites/default/files/documents/2020/03/environmental-cleaning-and-disinfection-principles-for-covid-19.pdf>.

<sup>ii</sup> **Chemical Disinfectants**, *Centers for Disease Control and Prevention (CDC) - U.S. Department of Health & Human Services*, <https://www.cdc.gov/infectioncontrol/guidelines/disinfection/disinfection-methods/chemical.html>, accessed 26/03/2020.

<sup>iii</sup> **Chemical Disinfectants**, *CDC*.