WHAT’S IN HAND SANITISERS?

- **Ethanol (C₂H₅OH)**
- **Propanol (C₃H₇OH)**
- **Isopropanol (C₃H₇OH)**
- **Chlorhexidine**
- **Benzalkonium chloride**
- **Glycerol**

Alcohol-based sanitisers contain 60-95% alcohol. Most contain either ethanol, n-propanol, isopropanol, or a combination of these.

Chlorhexidine and benzalkonium chloride are also found in some sanitisers. Both are also used in non-alcohol-based sanitisers.

Other ingredients include glycerol, which acts as a moisturiser to stop your skin drying out. Hydrogen peroxide is added to prevent bacterial contamination in the hand sanitiser.

HOW DO HAND SANITISERS WORK?

**VIRUSES**

- **Envelope**
- **Viral genome**
- **Envelope protein**

Alcohols in hand sanitisers alter (denature) the structure of proteins. They destroy the cell wall and membranes of bacteria cells, and the envelope of viruses (including coronavirus). They’re less effective against non-enveloped viruses. Non-alcohol-based sanitisers also kill bacteria but are less effective against viruses.

**BACTERIA**

- **Capsule**
- **Cell wall**

**HOW EFFECTIVE ARE THEY?**

MINIMUM OF 60% ALCOHOL

Hand sanitisers with >60% alcohol are effective if applied generously. However, they don’t kill all virus types and are less effective on dirty or greasy hands.

WASH HANDS FOR 20 SECONDS

Hand washing with soap for 20 seconds washes away bacteria and viruses, and also removes dirt and grease. Antibacterial soaps are no more effective.