

## The Science in The Can.

Each can of X-Mist contains a mix of germ-killing ingredients, including ethanol, virucide and ionised biocide.

Ionising the biocide causes it to separate from the other chemicals and makes the contents act like 2 opposing magnets (positive and negative). This means when expelled from the can the active ingredients travel very fast at a micron level within the mist produced. The ionised water within the biocide works with a rust inhibitor, this stops the inside of the can going rusty and makes sure it will not kill its own fragrance.

The amount of Ethanol/Alcohol/Isopropanol within the mix is over 80%, which is much higher than the UK Government guidelines on killing Covid 19 (61%). The guidelines also state a minimum requirement for a log kill rate of 3, whereas X-Mist has a log kill rate of 6.

When expelled into the air, X-Mist is slightly damp, this is controlled by the special actuator on top of the can. The actuator is factory set so that it evenly spreads small particles of biocide and viricide of 40 microns. At this size the product will drift in the air and land on all surfaces leaving a coating without leaving any residue. It also kills any odours in the air at the same time.

The biocide travels by piggy backing the Ethanol/Alcohol/isopropanol. The mist produced stays active for around 15 mins, killing off any airborne germs, before vaping off and becoming inert. The biocide is left behind leaving a microscopic coating on all surfaces. This coating will remain active for up to 7 days, but is depending on conditions, i.e. is the surface also being wiped with bleach / other aggressive cleaning materials, subjected to excessive use or being constantly rubbed. By remaining active, it means that when new viruses or germs make contact with the coated surface, they are also eliminated.

Biocide is extremely effective at killing bacteria, viruses, moulds and fungi. As smells are produced by bacteria and other micro-organisms X-Mist is also an odour neutraliser by killing the bacteria that produce bad smells. Thus, leaving a clean fresh smell from the fragrance introduced to the mist during manufacture.

X-Mist is tested and certified to BS EN 1276, BS EN 1650. We are currently awaiting full BS EN 14476 approval.

