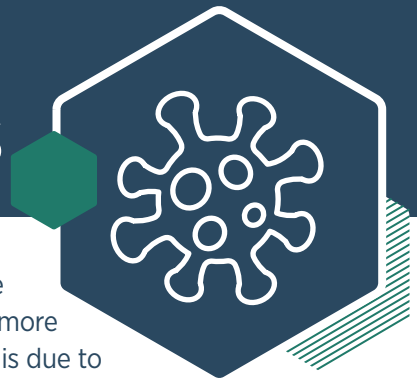


THE SAFE AND EFFECTIVE USE OF BIOCIDAL DISINFECTANT PRODUCTS



Disinfectant manufacturers specify dilution rates to ensure products are used as they are intended and to achieve the required efficacy. This can seem confusing as there may be more than one dilution rate shown, and these may differ significantly. However, this difference is due to differing regulatory and operational requirements.

Why do some products display more than one dilution rate?

There are two regulatory bodies who publish dilution rates for biocidal products, the Health and Safety Executive who oversee the Biocidal Products Regulation (BPR) and the UK Department for Environment, Food & Rural Affairs (DEFRA), which oversees animal health and agricultural biosecurity.

The Biocidal Products Regulation (BPR)

This regulation now controls the authorisation of all disinfectants/biocides in the UK and EU. A biocidal product is a substance which claims to control harmful or unwanted organisms through chemical or biological means. The regulation is designed to reduce the risk to the operator and the environment, both directly and indirectly. The use of the product is subject to a detailed risk assessment based on frequency, quantity and location to ensure that risk is minimised.

Dilutions on BPR authorised products are not estimates or the manufacturer's recommendation, they are the result of specific, detailed test methods to reflect the area of use. These results are then used to assign an authorised dilution, typically against a worst-case scenario microorganism. The manufacturer is required to show this dilution on the label and marketing.

Many disinfectants are already subject to the BPR and are now classed as Biocides, such as those based solely on iodine, lactic acid and many others. However, as Biocidal authorisation is based on active ingredient, certain disinfectants are not yet subject to the regulation until they are called forward one after another by the regulating authorities.

Some disinfectants contain multiple active ingredients and in these cases, it is the active ingredient which is subject to the BPR last that decides when the disinfectant is submitted for authorisation. For example disinfectants containing additional glycolic acid will be subject at the latter stages of BPR authorisation.

It may take at least several years to complete authorisation for all disinfectants, with many not passing the stringent safety and efficacy requirements.

DEFRA (DAERA in Northern Ireland)

DEFRA are the government department responsible for approving disinfectant products for use in the event of a notifiable disease outbreak. As stated on the DEFRA website, "by law you must use a DEFRA-approved disinfectant when there is an outbreak of a notifiable disease".

Manufacturers must submit their products to DEFRA for testing to achieve an approved dilution rate which must be used during a disease outbreak. These test methods differ from the European test methods available for general efficacy data and quite often give different dilution results due to the test parameters. The manufacturer must then state this dilution on their product label and marketing information.

DEFRA regularly retests products that are sourced from the marketplace to check they still meet the required standard. If the selected product fails the check test, DEFRA will suspend an approval for a specific 'order' such as Tuberculosis Orders, or Foot and Mouth Orders. The manufacturer must then submit for retesting which can take several weeks.

The BPR dilution rates should be used for routine disinfection. In contrast, DEFRA approved dilution rates are specifically used only for disinfection during notifiable disease outbreaks, such as TB, Foot & Mouth and Swine Vesicular diseases. In these cases, enhanced biosecurity measures require adjusted disinfectant concentrations to deal with the outbreak.