

# ecoANOLYTES

# dew

## INFORMATION LEAFLET

HEALTH & SAFETY at WORK and  
CONTROL of SUBSTANCES HAZARDOUS to HEALTH.  
CONSIDERATIONS for COVID-19



pH SKIN  
COMPATIBLE

DESTROYS  
VIRUSES

USE AROUND  
PETS

USE AROUND  
FAMILY

FOOD PREP  
AREA SUITABLE

VEGAN  
FRIENDLY

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The current Pandemic is posing many problems for all concerned, particularly those with responsibility for Health & Safety. To follow Government 'guidance' has been the default adopted by most, but simply following Government or indeed anyone else's 'guidance' or 'advice' does not absolve a person/department/company/organisation of their statutory responsibilities under the Law.

Prior to Coronavirus, infection management and control, for most organisations, was a relatively minor safety activity, that, in general and, understandably, attracted little thought and attention at a strategic level. Now it is a core business activity and the duties on an Employer, in particular are:

1. Under the Health & Safety at Work Act, an Employer is required to **take all reasonable steps to reduce the risk of infection in the workplace**. Managing the risk of infection in the workplace does not exclusively apply to Coronavirus, it includes all reasonably foreseeable viruses that employees might be exposed to. In addition, the clarity that workplace safety must include home working, makes risk management, a more shared and personal responsibility for employees. The steps an Employer takes, will inevitably involve the use of potentially hazardous substances, depending on the choice of disinfectants adopted.
2. Further to the HSAW Act, the COSHH Regulations, required an Employer to 'frequently review the use of hazardous chemicals and substances they are using to manage the risk'. Where these substances are hazardous, they must 'actively try to find safer alternatives' and, where a safer alternative is identified, available and, is not disproportionately expensive, they must adopt the safer alternative.

Human virus management is now a strategic issue for senior leaders as well as organisational specialists. The following information is provided to assist in the review of your approach, which should ensure that decisions taken, are in compliance with HSAW and COSHH legislation, which quite clearly, will not be the case, if simply following Government 'guidance'.

Firstly, we suggest that a business should ask itself 4 strategic questions:

- Are we satisfied that our risk control measures are suitable and sufficient for the range of viruses that our employees are exposed to and, are we content that those measures can be applied during the journey to and from work, in the workplace and during home working?
- Are we satisfied that we have investigated the range of options available in terms of both the substances we use to disinfect and the methods we use (including the use of misting/fogging)?
- Are we satisfied that, based on our research and investigations, we have compared all available substances against our traditional approach and, have we adopted the safest alternatives?
- Have employees been consulted and included in those decisions and, have we fully documented the reasons and supporting evidence for final decisions about the safest approach?

To assist in answering these questions, we offer the following information for consideration:

### Background.

The occupational use of hazardous materials is regulated under the Control of Substances Hazardous to Health (COSHH) Law, which requires Employers to control substances that are hazardous to health. You can prevent or reduce workers' exposure to hazardous substances by:

- finding out what the health hazards are.
- deciding how to prevent harm to health (risk assessment).
- choosing the safest alternative – which will always be the substance that has the least impact on health – and hopefully also has the least impact on the environment.

These simple steps are easy to follow. In the case of infection control, there are substances and preparations that have the potential to cause harm to humans, for example, through ingestion, inhalation, or absorption. The purpose of the risk assessment under regulation 6 of COSHH is to “enable Employers to make valid decisions about the measures needed to prevent or adequately control the exposure of their employees to substances hazardous to health arising from the work”.

During this pandemic, many Employers are relying on Government and/or other statutory authority guidance, when making decisions about infection control procedures and, decisions about the substances they are using for disinfection. Other Employers have just continued to use the same substances they have been using for years. **Neither of these options is advisable**, because the Employer is the responsible party, not government nor any adviser, so it is probably a good idea to undertake a more strategic review of your approach.

That review must include all the hazardous substances you might have been using for many years, because the aim of the assessment (review) process is to ensure that the safest substances are used in the future. The COSHH Regulations require that, if an Employer identifies a safer alternative to an existing product, they should stop using the less safe product and start using the safer alternative – if practicable.

Relying on government or statutory authority guidance is not sufficient. The problem with this approach is that the guidance you are relying on is only as good as the competence of the person who wrote the guidance and, the underpinning research, data and evidence upon which the advice is based. **Government advice is not infallible**, examples of bad Government advice include: ‘nicotine is safe’, ‘asbestos is safe’, and ‘XYZ cladding is not a fire risk’. Government advice also often has a political dimension.

**The legal duty is on you, the Employer** and, by undertaking your own simple and sensible analysis of the products being used, any Employer can meet the COSHH Regulations. Many companies and organisations have adopted alcohol-based hand sanitisers – **these require a COSHH assessment**. Companies are also using a variety of “deep clean” systems and technologies that use Quaternary Ammonium Compounds (QUATS) as the disinfection agent, **these also require a COSHH assessment**.

To support your assessment, the concerns with these 2 disinfectants types are summarised below.

**Alcohol based sanitiser.** At the start of the pandemic the UK government advice followed the WHO guidance, stating: "Use an alcohol-based hand sanitiser that contains at least 60% alcohol, if soap and water are not available". But on 13th March 2020 that changed, instead, Public Health England referred to HSE advice. The Health and Safety Executive (HSE) recommends hand washing with soap and water and, the use of Biocidal products, regulated in the UK under the Biocidal Products Regulation (BPR), that have been tested to EN14476. The BPR requires that the active substance must be listed on the ECHA (European Chemicals Agency) website otherwise it cannot legally be sold. Many alcohol based sanitiser products are not so listed and therefore, they haven't been tested to EN14476. Anyone using such a product is breaking the law.

Alcohol based sanitisers are toxic, flammable, damage the skin and can cause respiratory problems. In some circumstances (such as in young children) represent a significant risk to health and well-being. Alcohol is also unsuitable for environments where the presence of large volumes of alcohol is not appropriate (e.g. prisons, places of religious worship, Schools, childcare facilities, etc).

**Quaternary Ammonium Compounds.** (QUATS for short), are a type of potent chemical, typically found in many cleaning and disinfecting products and, because QUATS leave behind a residue on surfaces and substrates, so they are frequently offered as a solution that provides for extended protection, sometimes claiming protection for many days.

Whilst the idea of extended protection might be appealing, it comes at a cost. Deep cleaning with QUATS, which will kill a lot of viruses (because QUATS are very potent chemicals), requires extensive PPE when they are applied, which gives a clue to the real potential of the harmful effects of QUATS. The residue they leave behind is potentially harmful to health and the environment. Hence conventional cleaning is usually a 2-phase process:

- firstly clean the surface with the product then,
- secondly rinsing the surface with water,

but if you do this, it immediately invalidates any claims of extended protection. Under the biocide regulations (BPR), QUATS do have a maximum residue level (MRL), a level at which they can become harmful to humans and the environment.

In addition to harming germs, QUATS are lung irritants and can contribute to asthma and other breathing problems. They irritate skin too and can lead to rashes. In addition, there is emerging scientific evidence that shows that exposure to QUATS is harming sperm quality, reducing fertility and resulting in birth defects in mice.

We simply cannot be certain yet, as whether these impacts are part of a more general reduction in human fertility. Lastly, the widespread overuse of QUATS is creating superbugs – that are resistant both to QUATS and more importantly, antibiotics, which is problematic on so many levels.

## Summerising

The following table highlights the various hazards that we suggest an Employer should be reflecting on, as part of their COSHH assessment. Our analysis, based on extensive research, which we are both willing and able to share, logically concludes that Electrolysed water (which DOES NOT require a COSHH assessment) is at least as effective and a much safer alternative to Alcohol or QUATS when used as a sanitiser and this is why all DEW disinfection products only use Electrolysed water with HOCl (an integral component in our body's defence mechanism) as it's sole active ingredient. It is also the most cost effective as it's 99.84% water.

<u>Hazard type</u>	<u>Alcohol sanitiser</u>	<u>Quaternary Ammonium Compounds.</u>	<u>DEW Electrolysed Water (HOCl)</u>
Poisonous	YES	YES	NO
Flammable	YES	USUALLY	NO
Toxic	YES	YES	NO
Irritating to skin and eyes	YES	YES	NO
PPE required for use	YES	YES	NO
Contains a range of complex chemicals	YES	YES	NO
Does it add to "superbug" problem	YES	YES	NO
Suitable for Norovirus as well as other common viruses	NO	NO	YES
Negative/detrimental impact our eco systems?	YES	YES	NO

## Conclusion

We hope that this information will assist you in completing the risk assessment for your infection control approach and your COSHH assessment of your existing and proposed disinfection products. Given the obvious conclusion from this table, if a decision is made to use harmful substances in preference to safer alternative, then we suggest that full documentation of the reasons and supporting evidence be assembled, in order to provide legal protection for the people/department responsible for that decision.

DEW Disinfection Products offer a compliant, safer and cost effective alternative to Alcohol or QUATS based sanitisation products.

Government and Statutory Authority guidance and advice is not infallible, so relying on such guidance or advice is far from a sensible or satisfactory way to discharge your responsibilities, the Duty of Care, legal accountability and responsibility will always remain with the Employer.

It is your responsibility and therefore your decision and whatever the outcome of the review, whatever the decision, we hope our simple and logical approach has assisted/supported you in determining the safest, most effective route to follow.

## EUROPEAN CERTIFICATION

All DEW Disinfection Products have an extremely low manufactured carbon footprint of under 7gm per litre and they comply with the European Biocide Regulations (BPR), so they have therefore been successfully tested to the following European Standards:

- BS EN 901 - A European standard for additives, used for the disinfection of drinking water, certified fit for human consumption.
- BS EN 1276 - Chemical Disinfectants Bactericidal Activity Testing.
- BS EN 1499 - Chemical disinfectants and antiseptics: Hygienic hand wash.
- BS EN 1500 - Chemical disinfectants and antiseptics: Hygienic hand rub.
- BS EN 1656 - Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of bactericidal activity of chemical disinfectants and antiseptics for use in the veterinary field - Test method and requirements (Phase 2, Step 1).
- BS EN 13623 - Chemical disinfectants and antiseptics. Quantitative suspension test for the evaluation of bactericidal activity against Legionella of chemical disinfectants for aqueous systems- Test method and requirements (phase 2, step 1) Efficacy tests against enveloped and non-enveloped virus.
- BS EN 13697 - Chemical disinfectants and antiseptics - quantitative surface test for the evaluation of bactericidal and/or fungicidal activity of chemical disinfectants used in food, industrial, domestic and institutional areas (Phase 2, Step 2); Efficacy against spore forming bacteria in suspension; Efficacy against bacteria in suspension: (the preferred efficacy test of the Food Standards Agency).
- BS EN 14476 - Chemical Disinfectants and Antiseptics – Quantitative Suspension Test for the Evaluation of Virucidal Activity in the Medical Area (the product can be used in medical establishments for the disinfection of surfaces).

DEW Disinfection Products comply with the requirement of the UK Food Standards Agency (FSA) and those of the European Union, with respect to its use in food preparation areas.

Remember:

Use biocides safely. Always read the label and product information before use.

## STAY SAFE

For more information or to arrange a call, please use the contact details below

Email: [info@dewproducts.co.uk](mailto:info@dewproducts.co.uk) Web: [www.dewproducts.co.uk](http://www.dewproducts.co.uk)