How Byotrol and BSI PAS 2424 helped bring rigour to testing residual antimicrobial efficacy

"A game changer for the hygiene sector"– Demonstrating biocidal product efficacy in real world environments.

PAS 2424 Quantitative surface test for the evaluation of residual antimicrobial (bactericidal and/or yeasticidal) efficacy of liquid chemical disinfectants on hard non porous surfaces – Test method

Challenge

Household products using biocidal technology with residual antimicrobial activity (e.g. long-lasting protection, and residual action) can be used on surfaces which are challenged by the rigours of everyday life – spills, wipes and general household duties.

The European Union regulation Biocidal Products Regulation (BPR)[1]) requires the submission of product dossiers to the Health and Safety Executive (HSE) to substantiate product claims. In early 2014 Byotrol recognized there was a need for a test method by which residual antimicrobial activity could be independently measured and assessed.

However, there was no **European or International Standard test methodology** for assessing the residual antimicrobial activity of a chemical disinfectant/ antimicrobial product. Researchers and companies have in the past designed individual test methods in an attempt to demonstrate residual antimicrobial efficacy. Previously test methods lacked the credibility and rigorous consensus that would ensure that the test was relevant to how the product would be used outside the laboratory. The existing test methods largely involve applying a product to a surface and leaving it for a defined period of time before challenging with micro-organisms.

Solution

Byotrol, a specialist in biocidal technology, decided to work with BSI to develop a consensus-based test method, as a BSI PAS. This would allow residual antimicrobial activity to be independently measured and assessed. Byotrol chose BSI to help develop the PAS because of BSI's **credibility**, **independence** and ability to **promote innovation** across the industry.

Byotrol found the PAS timeframe ideal as it meant the PAS was published before the BPR came into effect. Typically, PASs are published within 9–12 months from inception which means that they can address business needs within a short timescale.

During the development of the PAS, BSI built an independent steering group with, representatives from organizations with expertise in test development; healthcare professionals; consumer groups; professional bodies; and the HSE. This sharing of expertise and knowledge allows for an agreed single approach based on consensus within the group. The broad range of views from the steering group, as well as the feedback received during the public consultation, ensure that the final document promotes good practice.

"PAS 2424 will be a game-changer for the hygiene sector. For the first time ever, consumers will be able to confidently choose products based on their real-life efficacy. The test will also make it easier for laboratories to standardise their testing procedures, allowing for more accurate comparisons between product types. We have a robust methodology in place that will provide greater reassurance for the consumer than ever before."

David Traynor, Byotrol CEO

Outcome

PAS 2424 reflects, within a laboratory test method, the actual conditions in which a product will be challenged in daily life. By sponsoring the development of the PAS, Byotrol have demonstrated leadership within their sector and provided their existing and potential customers with additional confidence and trust in their products. Validating long-lasting claims under the BPR will be made simpler for any organization involved with biocidal technology due to PAS 2424. Any organization using the PAS will be able to substantiate – to their customers, industry and the BPR – their claims that the product works exactly as they say it does.

PAS 2424 has been acknowledged both in Europe and the United States, this has stimulated the process to initiate the development of long lasting antimicrobial test methodologies across the globe.

About Byotrol

Byotrol plc (BYOT.L), quoted on AIM, is a specialist developer of residual antimicrobial technologies, maximising insights to identify, develop, formulate and commercialise cutting-edge antimicrobial technologies delivered in direct sales and in long-term licensing partnerships with consumer and professional multinationals. Byotrol's patented suite of technologies deliver powerful broad-spectrum efficacy with residual performance optimised against commonly occurring and industry-specific pathogens.

About PAS

A PAS (Publicly Available Specification) is a consensus based standardization document which can be initiated by any organization in collaboration with BSI. Creating a PAS can help organizations.

- Build trust with your customers and suppliers
- Support growth in innovative products or services
- Increase global reach through partnership with BSI
- Become a thought leader

Find out more at **bsigroup.com/pas**

Order your copy of PAS 2424 at **shop.bsigroup.com/pas2424**

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References

1. EU Biocides Regulation (Regulation 528/2012)

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