

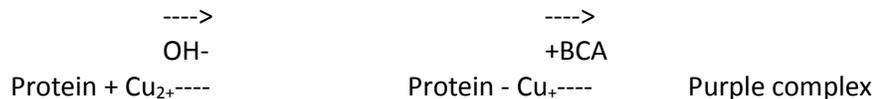
Sporicidin® Microbial Test Kit SPDN0300 Technical Information Sheet

Sporicidin® Microbial Test Kit (part # SPDN0300) is a quick and easy way to monitor or test for the presence of mold, fungi and other allergen related biological contamination.

SPDN0300 detects protein residues that are on a surface after water damage or due to microbial growth. To use SPDN0300, simply swab a surface, release the reagent and if mold or allergen residue is present the reagent will turn purple. The color change provides a semi-quantitative measure of the surface hygiene condition. The more contamination that is present, the quicker the color change to purple and the darker the color. SPDN0300 quickly determines the level of mold and allergen contamination on a surface and can show whether a surface is clean after restorative cleaning or decontamination, enabling decisions to be made as to whether or not corrective action is necessary.

How this test works

The test is based on the principle of the Biuret reaction where under alkaline conditions the copper ions (Cu_{2+}) form a complex with the peptide bonds of proteins and becomes reduced to copper Cu_+ . Bicinchoninic acid (BCA) under alkaline conditions is a highly sensitive, stable and specific reagent for Cu_+ forming a purple complex. The chromogen formed can be assessed visually with SPDN0300.



Test performance

The reaction is time-dependent. The color develops with time and therefore it is important to record color change up to 10 min and disregard any color change after this set time. Most reactions happen within 60 seconds. Timing can be stopped as soon as any color change is observed.

SPDN0300 provides dirty or clean result as well as a how dirty result based on the speed of the reaction. The reaction is also temperature-dependent and therefore it is important to allow the devices to equilibrate to ambient room temperature (15 - 25°C) if they have been stored at a different temperature.

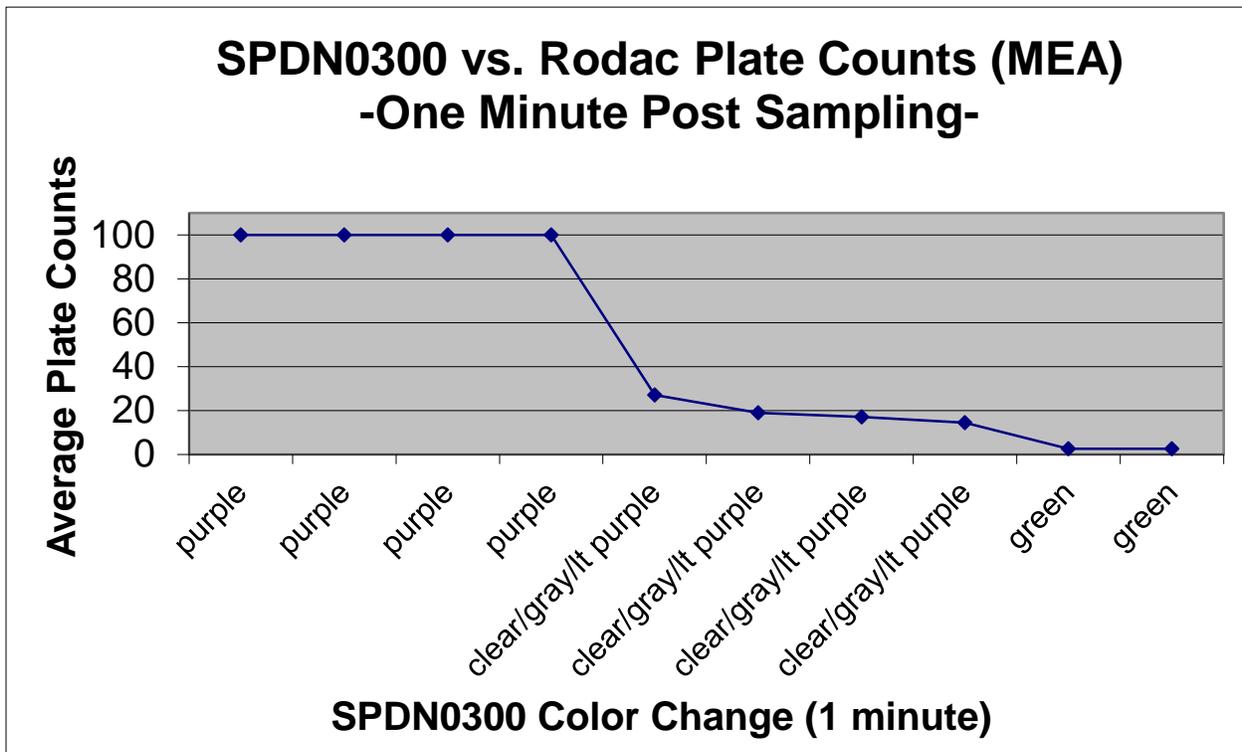
Other reducing agents giving a positive result with SPDN0300. This test also detects other substances capable of reducing the copper (Cu^{++} to Cu^+) such as reducing sugars (glucose) and uric acid. Other strong reducing materials such as ascorbic acid (present in some fruit juices) or tannin (present in tea) as well as protein containing allergens and related biologicals may also give a positive result with SPDN0300.

Sensitivity performance: 20ug protein in 10 minutes at room temperature 10ug 10 minutes at 37°C

Contamination level corresponding to color level with SPDN0300 test kit

The chart below shows the color change associated certain dilutions of Protein. ($\mu\text{g}/100\mu\text{l}$)

Levels	Detection	Color	Result
1	0 - 15ug	Lime green	Pass
2	20 - 60ug	Grey/Light	Fail
3	60 - 300ug	Light Purple	Fail
4	>300ug	Dark Purple	Fail



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