

Product Information Sheet

P6820
PTC³

Synonym: Plant Tissue Culture Contamination Control, PTCubed, PTCCC

Properties:

Form:	Liquid
Appearance:	Clear
Application:	Plant Tissue Culture Biostat/fungostat
Solubility:	Freely soluble in water
Typical Working Concentration:	0.2 - 2 mL/L for general usage. >2mL/L it can act as a biocide
Storage Temp:	2-6°C
Other Notes:	Proprietary Formulation Autoclavable

Application Notes:

We have compared PTC³ in our laboratories to another popular contamination control product, and found that it performs equivalently in reducing bacterial and fungal growth. Shown below in Figure 1, both *Bacillus subtilis* and *Escherichia coli* inoculated in log-phase growth to 1X Murashige & Skoog (MS) liquid with 0.2% (v/v) PTC³ or 0.2% (v/v) competitor product did not grow to the extent that it did in just 1X Murashige & Skoog liquid media over 16 hours at 25°C and shaking at 125 RPM.

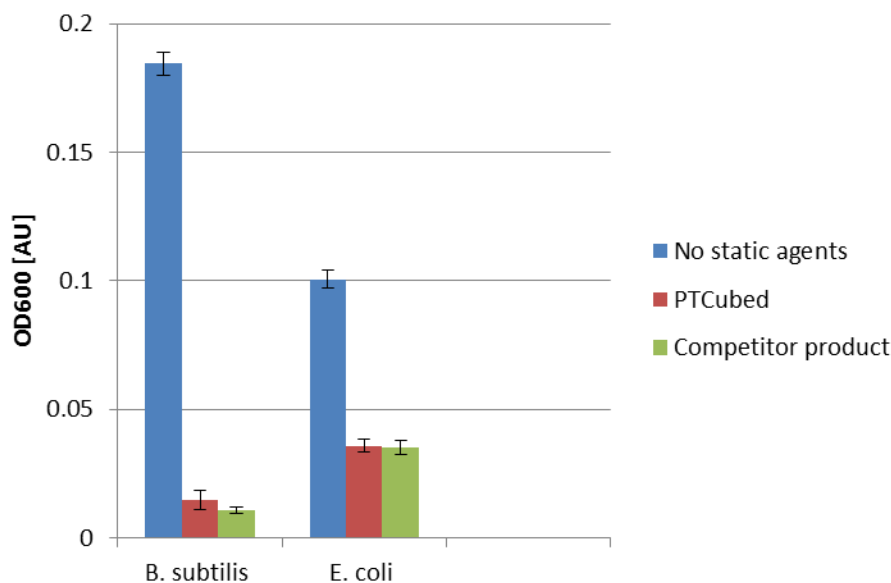


Figure 1. Bacterial Growth Inhibition of PTC³ (0.2 v/v%) and a similar product (0.2 v/v%) in 1X liquid MS

PTC³ was also shown to inhibit fungal growth of *Aspergillus niger* on 1X Murashige & Skoog gelled media. Through 7 days at 25°C, no fungal growth was observed on cultures containing 0.2% (v/v) PTC³ or 0.2% (v/v).

The components of this product can be bound by proteins in media (e.g. peptone, casein) and rendered inactive.

At PhytoTechnology Laboratories we believe that there is no substitute for proper explant disinfection in the maintenance of long-term stock cultures. However for educational demonstration purposes or hobbyist's looking to

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try plant tissue culture, PTC³ will allow you to perform routine tissue culture less stringently with a lower concern of losing your tissue culture to everyday contamination.

Please Note: While PhytoTechnology Laboratories® tests each lot of this product with two or more plant cell/ tissue culture lines, it is the sole responsibility of the purchaser to determine the appropriateness of this product for the specific plants that are being cultured and applications that are being used.

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