



BioClean



When sterile is not clean enough BioClean inert tips for zero interference

For successful experiments, pipette tips need to be completely inert and must not interfere with samples. Being contamination-free is no longer enough. Pipette tips also need to be free of any bioactive components – they need to be BioClean. From raw material selection, clean production to automated packaging, and with frequent testing, Rainin BioClean tips are the purest and safest on the market.

Many brands of pipette tip in the market are labeled as contamination-free or sterile, but recent publications¹ show that even these tips can compromise the outcome and adversely affect the scientific work.

Results can be compromised by additives to the virgin polypropylene, such as the detergent DiHEMDA and the releasing agent oleamide, commonly used by some pipette tip manufacturers. These bioactive components can adversely affect experiment outcome. Rainin's BioClean tips have been proven to be free of such components and therefore will have zero interference on results.

RAININ BioClean – 100% clean, 100% pure

BioClean tips from Rainin showed no traces of such additives or bioactive contaminants, in internal quality controls and in external audits. The absence of bioactive components in the raw materials, as well as the proven lack of external contaminants (DNA, DNase, RNase, ATP, Pyrogens, or PCR Inhibitors) in the production and packaging processes, ensures that high-quality Rainin BioClean tips are completely inert and will not influence experimental outcome in any way. A safe investment in your lab performance.

METTLER TOLEDO

Maximum Performance with Zero Interference

Not all tips are the same. For optimal performance and experiment success, tips have to be of highest quality, contamination-free, and totally inert, so as to avoid affecting results. At Rainin, we use every conceivable measure to ensure the very highest tip quality.

The Purest Material

Rainin uses pure virgin polypropylene resin in the form of CFR 21 certified² pellets, free of any additives or dyes, and extensively tested.

Clean Manufacturing and Packaging

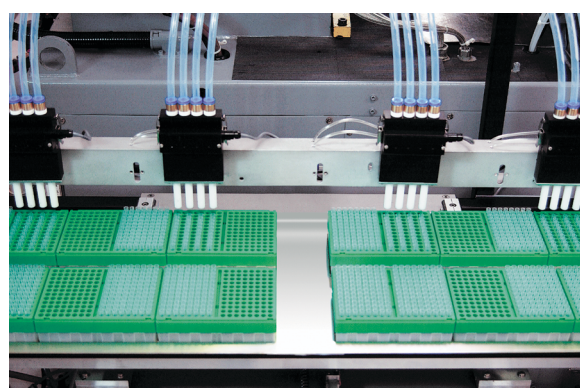
Rainin's tip manufacturing facility is a Class 100,000 clean room. The fully automated material handling process feeds virgin polypropylene material from silos directly into molding machines, avoiding any human contact. Tips are molded at high temperatures – 250°C. In addition to absolute material purity, Rainin's strict conformance to ISO 9001 manufacturing procedures ensure the elimination of any external sources of contamination.

Tested for Maximum Safety

Rainin BioClean tips pass the most sophisticated testing protocols. For example, a test for DNA applies qPCR with sensitivity levels down to less than 1 copy number of human template DNA, so even the smallest trace amounts are detected. Because the most stringent test methods are applied to all potential contaminants (DNA, DNase, RNase, ATP, Pyrogens, PCR inhibitors, trace metals, trace organics), you can rely on Rainin BioClean tips to be the safest in the market.



Clean room manufacturing



Automated handling eliminates human contact.

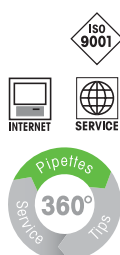


Automated filter assembly, no human contact

1. McDonald, G., Hudson, A., Dunn, S., You, H., Baker, G., Whittall, R., Martin, J., Jha, A., Edmondson, D., and A. Holt. 2008. Bioactive Contaminants Leach from Disposable Laboratory Plasticware. *Science* 332(5903): 917.

2. CFR Title 21 (2003) 177.1520 (a), (b) and (c) 1.1 Olefin polymers, Montell Polyolefins Datasheet

Rainin and Pipetting 360° are trademarks of Rainin Instrument, LLC.



Quality certificate ISO 9001
Internet: <http://www.mt.com/rainin>
Worldwide service

Specifications subject to change
© 2010 Rainin Instrument, LLC
a METTLER TOLEDO Company

PB-215 Rev A-I

www.mt.com/rainin

For more information