
Quality Certificate for TreffLab Microtubes

This Document is valid for:

TreffLab CapLock Microtubes	(strong tightness by double lock)
TreffLab ClickFit Microtubes	(medium opening forces)
TreffLab EasyFit Microtubes	(gentle opening forces)
TreffLab PCR Tubes	(thin wall design)

Production

Herewith Nolato Treff AG confirms that all microtubes are made of virgin polypropylene resin providing high chemical resistance. No additives are used. The microbiological controlled fabrication is carried out in clean room class 8, ISO 14644-1.

Additional Quality Parameters of TreffLab Microtubes are:

Analyses are performed by an independent Swiss laboratory for molecular biological and microbiological analytics, accredited ISO/IEC17025 for real-time PCR.

Free of RNase	(< 5x10E-9 Kunitz units)
Free of DNase	(< 5x10E-6 Kunitz units)
Free of human DNA	(< 2 pg DNA)
Free of PCR inhibitors	(< 10 copies)
Free of endotoxins	(< 0.001 EU/ml)
Free of ATP	(< 30 RLU)

Analyses of physical properties are performed by Quality Department of NolatoTreff AG.

Temperature: TreffLab Microtubes withstand temperature range from gas phase of liquid nitrogen to autoclaving (121°C, 20 minutes, 100% humidity) according to DIN EN 285.

Centrifuge forces: TreffLab Microtubes withstand forces up to 30'000 g (0.2 ml, 0.5 ml, 1.5 ml) and up to 20'000 g (2 ml) RZF.

Test parameters are: Tubes filled with 90% of indicated volume: 20% Glycerol or 70% Ethanol, or 150 mM NaCl in H₂O. Incubation of filled tubes took place between -80°C and 20°C. Centrifugation was done at 4°C and 20°C for 10 min up to 30.000 g with fixed angle rotor. Quality analysis: Automatic 3D control of potential micro fissures within wall of the microtubes.

Best regards by Nolato Treff AG



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