

## TECHNICAL DATA SHEET 733

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# ViaCheck™ 100% Viability Control

## Description

ViaCheck 100% Viability Control is a suspension of ~20µm undyed microspheres that simulate 100% live cells. ViaCheck Viability Controls are image based instrument viability controls. These particle standards offer discrete “live” and “dead” populations. They can be delivered in customizable ratios and concentrations.

## Characteristics

Viability:	100% (95-100%)
Bead Concentration:	0.9 x 10 <sup>6</sup> - 1.1 x 10 <sup>6</sup> particles/ml
Particle Size:	18-22µm

## Material

### Material Supplied

- 20ml of ~20µm undyed microspheres in a solution of buffered salts and surfactant containing 0.08% sodium azide

### Material Required

- Cell Viability Analyzer ex. Coulter ViCell XR Cell Viability Analyzer
- Precision pipets with disposable tips to deliver 20 - 200µl, 200 - 1000µl
- Isotonic Buffered Saline Diluent (optional)

## Procedure

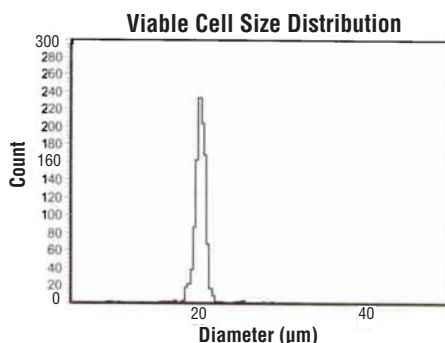
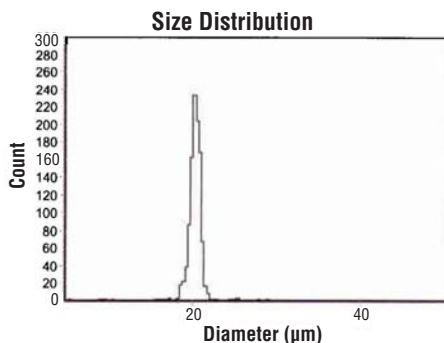
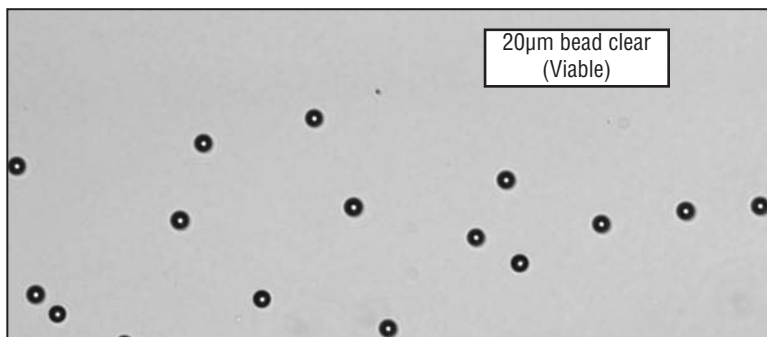
For the best accuracy be sure to work carefully and quickly when sampling and pipetting ViaCheck particles. Allowing the particles to stand for even a short period of time could lead to inaccurate data and results.

1. Vortex and mix (inversion or tube rotator) the vial of particles to ensure a well mixed suspension.
2. Place a minimum of 0.5 - 1.0ml of the particles into an analyzer sample cup.
3. Place the sample cup in the analyzer sampling station.
4. Using the ViCell XR analyzer menu, set up and save a “CELL TYPE” for Viability controls at the settings below. *Note:* These settings are guidelines to allow the user to analyze the ViaCheck Viability Control Particles and may have to be adjusted for each instrument.

<u>Cell Type</u>	<u>Viability Control</u>	<u>Cell Type</u>	<u>Viability Control</u>
Minimum Cell Diameter	5 (µm)	Viable Cell Spot Brightness	60%
Maximum Cell Diameter	50 (µm)	Viable Cell Spot Area	3.0%
Minimum Circularity	0.9	Decluster Degree	Low
Dilution Factor	1.0	Aspirate Cycles	2
Cell Brightness	85%	Trypan Blue Mixes	3
Cell Sharpness	100%		

5. Analyze the sample according to the analyzer’s instructions.

**Photograph and ViCell XR data of ViaCheck 100% Viability Control Particles**



**RESULTS**

Cell Count	1058
Viable Cell Count	1056
Viability (%)	99.8
Total Cells / ml (x 1.0E6)	1.09
Viable Cells / ml (x 1.0E6)	1.08
Average Diameter (µm)	20.29
Average Circularity	0.95
Images	50
Averages Cells / Image	21.2
Average Background Intensity	204

**Storage and Stability**

Store at 4-30°C. Freezing particles may result in irreversible aggregation and loss of binding activity.

**Safety**

This particle suspension contains sodium azide. Sodium azide may react with lead and copper plumbing to form explosive metal azides. Upon disposal of material, flush with a large volume of water to prevent azide accumulation. Please consult the Material Safety Data Sheet for more information.

**This product is for research use only and is not intended for use in humans or for *in vitro* diagnostic use.**

**Ordering Information**

Cat. #	Description	Size
24626	ViaCheck™ 100% Viability Control	20ml

**Related Products**

Catalog Code	Description	Size
24622	ViaCheck™ 0% Viability Control	20ml
24623	ViaCheck™ 50% Viability Control	20ml
24624	ViaCheck™ 75% Viability Control	20ml
24625	ViaCheck™ 90% Viability Control	20ml
24627	ViaCheck™ Concentration Control (1 x 10 <sup>6</sup> )	20ml
24628	ViaCheck™ Concentration Control (4 x 10 <sup>6</sup> )	20ml
24629	ViaCheck™ Concentration Control (8 x 10 <sup>6</sup> )	20ml

**To Order**

In The U.S. Call: 1-800-523-2575 • 215-343-6484      In Germany Call: (49) 6221-765767  
 In The U.S. FAX: 1-800-343-3291 • 215-343-0214      In Germany FAX: (49) 6221-764620

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