

For use in quality control/manufacturing process only.



# Density Reference Standard Beads (DRSB) Batch B

 **Version: 52**

Content Version: November 2024

Beads for one-point density calibration.

**Cat. No. 06 422 667 001** 1 x 10 mL Batch B

**Store the product at +2 to +8°C.**

<b>1.</b>	<b>General Information .....</b>	<b>3</b>
1.1.	Contents.....	3
1.2.	Storage and Stability .....	3
	Storage Conditions (Product) .....	3
1.3.	Additional Equipment and Reagent required .....	3
1.4.	Applications.....	3
<b>2.</b>	<b>How to Use this Product .....</b>	<b>4</b>
2.1.	Before you Begin .....	4
	General Considerations.....	4
	Acceptance range .....	4
	Sampling quality.....	4
	Working Solution.....	4
	Preparation of the DRSB solution.....	4
2.2.	Protocols .....	5
	Checking the FlowFactor (FF).....	5
	Adjusting the FlowFactor .....	6
	FlowFactor calibration.....	7
<b>3.</b>	<b>Supplementary Information .....</b>	<b>8</b>
3.1.	Conventions.....	8
3.2.	Changes to previous version .....	8
3.3.	Ordering Information.....	8
3.4.	Trademarks.....	9
3.5.	License Disclaimer .....	9
3.6.	Regulatory Disclaimer.....	9
3.7.	Safety Data Sheet .....	9
3.8.	Contact and Support.....	9
<b>4.</b>	<b>Lot-Specific Data .....</b>	<b>10</b>
	Standard labeling assay.....	10

# 1. General Information

## 1.1. Contents

Vial / bottle	Label	Batch	Function / description	Content
1	Density Reference Standard Beads	B	Beads for one-point density calibration.	1 bottle, 10 mL

## 1.2. Storage and Stability

### Storage Conditions (Product)

The product is stable at +2 to +8°C until the expiry date printed on the label, when handled as described in these Instructions for Use.

**⚠ Do not freeze.**

## 1.3. Additional Equipment and Reagent required

### Analyzer and accessories

- Cedex HiRes Analyzer\*
- Cedex HiRes Reagent Kit\*
- Cedex Sample Cups\*

## 1.4. Applications

The Cedex HiRes Analyzer measures the cell density, also known as concentration, of a cellular suspension, along with its viability status and cell characteristics such as diameter and compactness. To check the correct calibration with regard to the density, use the Density Reference Standard Beads instead of an ordinary cell sample.

This product is traceable for the following aspects:

- Particle Size: NIST, USA
- Particle Concentration: Physikalisch-Technische Bundesanstalt, Berlin, Germany

The Density Reference Standard Beads (DRSB) are designed to mimic cell behavior in flow dynamics. Due to their size and optical properties, they will be detected as dead cells by the Cedex HiRes Software.

## 2. How to Use this Product

### 2.1. Before you Begin

#### General Considerations

There is no general advice with regard to how often or how many counts should be done to ensure that your analyzer is working correctly. Roche Diagnostics has had good results using the DRSB on a monthly basis, carrying out 10 samples per run with the Cedex HiRes Analyzer.

#### Acceptance range

Two factors influence the acceptance range for calibration with Density Reference Standard Beads in connection with the Cedex HiRes Analyzer.

Factor	Influenced by
Sample preparation	Mixing, pipetting, and pipette quality (precision, accuracy, service state) have been shown to add approximately 1.5 to 2% to the variability in density measurements.
Measurement precision	<ul style="list-style-type: none"><li>Is based on the statistical nature of the measurement process.</li><li>Depends on the density of the DRSB used, Cell Type parameter settings, and the level of precision used for the measurement.</li></ul>

#### Sampling quality

Sampling quality is essential for the evaluation of the status of the instrument. Consider the following:

- Do not freeze the beads; only store beads at +2 to +8°C.
- Acclimate beads to +23 to +27°C prior to use.
- Verify the correct weight of the unopened bottle; see bottle label.
- Use an ultrasonic bath for mixing.
- Rock the bottle gently, including rocking upside down.
- Do not withdraw more than 2 samples from the bottle without remixing.
- Use only calibrated pipettes.
- Only trained staff should perform sample preparation.

#### Working Solution

##### Preparation of the DRSB solution

- 1 Verify that the beads have been stored correctly at +2 to +8°C.

**⚠ Do not freeze the beads.**

- 2 Verify that the bottle was securely closed before use.
  - Check the weight of the unopened bottle; the correct value is on the bottle label.

- 3 Allow the beads to acclimate to +23 to +27°C prior to use.

- 4 Shake the beads using an ultrasonic bath at +23 to +27°C and at the highest available intensity for 5 minutes.

**i** Cap should be slightly loosened but secured against falling over.

**⚠ Ensure that no beads are sticking to the base or side of the bottle before use.**

**i** The DRSB solution contains SDS, which may show signs of some coagulation or crystallization at low temperatures. Allow the beads to acclimate with occasional mixing at +25°C until the coagulation or crystallization disappears. Alternatively, gently roll the DRSB bottle between the palms of the hands until the coagulation has disappeared. As long as the DRSB solution has been allowed to acclimate to +23 to +27°C, and all steps in this Instructions for Use have been carried out, any remaining coagulation or crystallization will have no effect on the performance or quality of the DRSB solution when used in a Cedex HiRes Analyzer.

## 2.2. Protocols

### Checking the FlowFactor (FF)

- 1 Pipette 1 sample of 0.3 mL DRSB into a Cedex Sample Cup\* and immediately run the sample with factory settings for default Cell Type Std. Size.
  - Select the maximum possible setting for “precision”.

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- 2 Mix the DRSB thoroughly, then pipette the next sample of 0.3 mL into a Cedex Sample Cup\* and immediately run the sample.
 

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- 3 Repeat this procedure until 10 samples are processed.
 

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- 4 Calculate the mean value of the Total Cell Density (TCD) of the 10 samples used.
 

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- 5 Calculate the relative standard deviation of the TCD values of the 10 samples used, and verify that the relative standard deviation is less than or equal to 5%.
  - Otherwise, the Cedex HiRes Analyzer, the beads, or the handling must be checked and the calibration must be repeated.

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- 6 Calculate the deviation of the mean TCD value of the 10 samples used from the actual value which is given as Particle number/ml on the bottle of beads.
 

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- 7 Verify that the deviation of the mean TCD value is less than or equal to 5%, or as specified by your requirements, from the actual value given on the bottle for the beads.
  - If the value falls outside of the acceptable range, skip to Step 9.

---
- 8 Close bottle tightly and store beads at +2 to +8°C.
  -  **Do not freeze the beads.**
  - The current FF is correct and no change is necessary.

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- 9 If the mean value falls out of range, repeat Steps 1 to 5 using a second/different LOT (batch) of Density Reference Standard Beads.
  - Continue with Step 10.

---
- 10 Calculate the FlowFactor (FF) of each measurement series and the mean value of the two FFs, see section, **Adjusting the FlowFactor**.
 

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- 11 Verify that the deviation of the two FFs from the mean value of the FFs are less than or equal to 5%.
  - Otherwise, the Cedex HiRes Analyzer, the beads, or the handling must be checked and the calibration must be repeated.

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- 12 Calculate the new FF (mean value of the FFs), see section, **Adjusting the FlowFactor**, or follow your company's requirements.
 

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### Adjusting the FlowFactor

The FlowFactor (FF) is analyzer specific and part of the conversion factor that relates the number of objects detected in the Cedex HiRes Analyzer to the actual density in the analyzed sample. The conversion factor is linearly dependent on the FlowFactor, allowing for the possibility to compute the appropriate setting for this parameter via the comparison of Cedex HiRes Analyzer results versus a known density of a sample, such as the Density Reference Standard Beads. Refer to the relevant Cedex HiRes Operator's Manual for the location of the current FlowFactor. The location depends on the installed Software version.

- 1 Write down the current FlowFactor (FFold) and calculate a new FlowFactor as follows:

$$FF (new_1) = \frac{\text{actual density (according to bottle label)}}{\text{mean value TCD of measurement series 1}} \times FF (old)$$

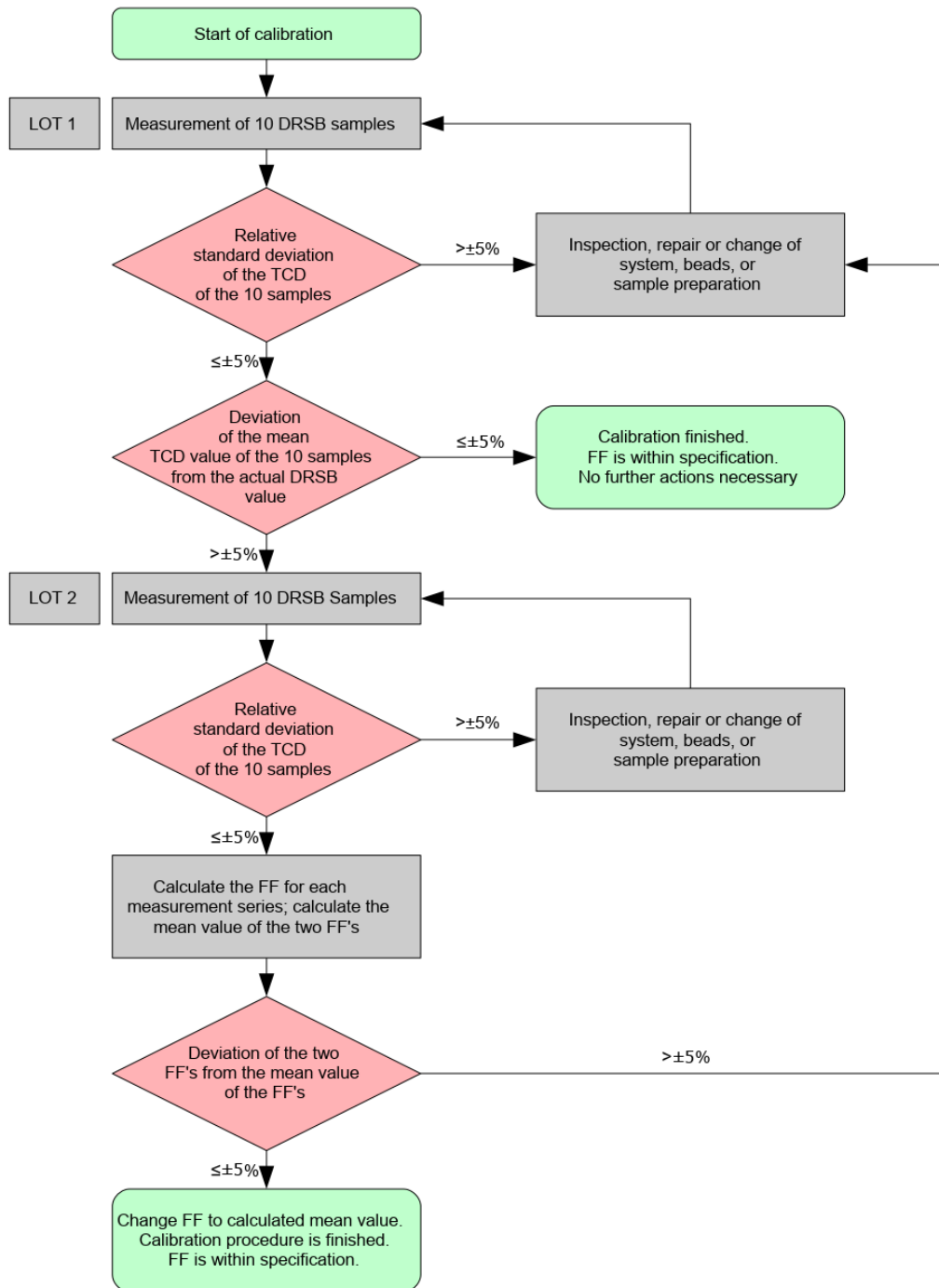
$$FF (new_2) = \frac{\text{actual density (according to bottle label)}}{\text{mean value TCD of measurement series 2}} \times FF (old)$$

("actual density" is specified as Particle number/ml on the label of the bottle of beads used for the calibration.)

$$FF (new) = \frac{FF (new_1) + FF (new_2)}{2}$$

- 
- 2 Refer to the relevant Cedex HiRes Operator's Manual for information about the location of the FlowFactor.
    - Update the FlowFactor in that location based on the result calculated in Step 1.
-

## FlowFactor calibration











**Fig. 1:** Calibration of Cedex HiRes Analyzer

## 3. Supplementary Information

### 3.1. Conventions

To make information consistent and easier to read, the following text conventions and symbols are used in this document to highlight important information:

Text convention and symbols	
 <i>Information Note: Additional information about the current topic or procedure.</i>	
 <b>Important Note: Information critical to the success of the current procedure or use of the product.</b>	
   etc.	Stages in a process that usually occur in the order listed.
   etc.	Steps in a procedure that must be performed in the order listed.
* (Asterisk)	The Asterisk denotes a product available from Roche Diagnostics.

### 3.2. Changes to previous version

Updated to include lot-specific data for new lot.

### 3.3. Ordering Information

Product	Pack Size	Cat. No.
Consumables		
Cedex Sample Cups	500 cups	05 650 623 001
Instruments		
Cedex HiRes Analyzer	1 instrument	05 650 216 001

### 3.4. Trademarks

CEDEX is a trademark of Roche.

All other product names and trademarks are the property of their respective owners.

### 3.5. License Disclaimer

Consult product detail pages at [custombiotech.roche.com](http://custombiotech.roche.com) for patent license limitations, if available.

### 3.6. Regulatory Disclaimer

For use in quality control/manufacturing process only.

### 3.7. Safety Data Sheet

Please follow the instructions in the Safety Data Sheet (SDS).

### 3.8. Contact and Support

For additional documentation such as certificates and safety data sheets, please visit [documentation.roche.com](http://documentation.roche.com).

#### Your Roche CustomBiotech Customer Service:

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## 4. Lot-Specific Data

Density Reference Standard Beads, Batch B	
REF	06 422 667 001
	52
valid for LOT	57130112
	Apr 2026

In this chapter, you will find lot specific data about your product. The table below provides the following information for each bottle produced for this lot.

Column 1: Bottle No. for the bottle.

Column 2: Actual concentration expressed in particle number/mL for the bottle.

Column 3: Total weight of bottle, including bottle, contents, and label.

Column 4: Check Box for marking which bottle was received

### Standard labeling assay

Use this table as follows

- 1 Print out the table
- 2 Find the bottle number on the bottle label as shown in Figure 2.
- 3 Place a check mark in the “Bottle Received” column to mark the specific bottle received for future reference.

This product is traceable in the following aspects:

- Particle Size: NIST, USA
- Particle Concentration: Physikalisch-Technische Bundesanstalt, Berlin, Germany



**Fig. 2:** Example of how to find the bottle number on the bottle label. The bottle number is circled.

ID-Nr. LOT 57130112	Concentration Particle number/mL (x 10 <sup>5</sup> )	weight (g)	Bottle received
B1	9.99	31.048	
B2	9.88	31.168	
B3	10.03	30.960	
B4	10.01	31.045	
B5	10.00	30.993	
B6	10.08	31.193	
B7	9.90	31.134	
B8	10.02	31.011	
B9	10.04	30.853	
B10	10.04	30.942	
B11	10.10	31.090	
B12	10.02	30.971	
B13	10.00	30.985	
B14	9.99	30.954	
B15	9.94	31.160	
B16	10.11	31.108	
B17	9.97	30.973	
B18	9.98	30.746	
B19	10.13	31.081	
B20	10.06	31.143	
B21	10.06	30.970	
B22	9.89	31.203	
B23	10.08	31.077	
B24	10.02	31.016	
B25	9.94	30.883	
B26	10.15	31.072	
B27	10.14	31.119	
B28	9.92	30.943	
B29	10.06	31.178	
B30	9.94	31.073	
B31	10.11	31.298	
B32	10.07	31.336	
B33	9.92	31.536	
B34	9.93	31.059	
B35	10.00	31.176	
B36	10.05	30.947	
B37	10.03	30.975	
B38	10.03	30.895	
B39	9.98	31.028	
B40	9.95	30.849	
B41	10.07	31.040	
B42	10.05	31.036	

ID-Nr. LOT 57130112	Concentration Particle number/mL (x 10 <sup>5</sup> )	weight (g)	Bottle received
B43	9.91	31.149	
B44	9.95	31.235	
B45	10.05	31.192	
B46	10.06	31.052	
B47	9.98	31.023	
B48	10.01	31.371	
B49	9.98	30.934	
B50	9.97	31.131	
B51	9.91	30.947	
B52	10.00	30.922	
B53	9.98	30.828	
B54	9.92	30.989	
B55	9.92	30.918	
B56	9.89	31.078	
B57	10.12	31.117	
B58	9.96	31.178	
B59	10.05	31.238	
B60	10.04	31.223	
B61	10.05	31.032	
B62	10.00	31.158	
B63	10.03	31.080	
B64	10.13	30.842	
B65	10.12	31.233	
B66	9.92	31.124	
B67	10.00	30.922	
B68	10.08	30.910	
B69	9.99	31.105	
B70	9.92	31.090	
B71	10.09	31.286	
B72	10.08	31.031	
B73	9.98	31.032	
B74	10.10	30.971	
B75	9.97	31.010	
B76	10.02	30.820	
B77	9.90	31.300	
B78	9.91	31.020	
B79	9.95	31.206	
B80	9.94	31.286	
B81	10.04	30.751	
B82	9.99	30.860	
B83	9.92	30.811	
B84	10.08	30.882	

#### 4. Lot-Specific Data

ID-Nr. LOT 57130112	Concentration Particle number/mL (x 10 <sup>5</sup> )	weight (g)	Bottle received
B85	9.99	31.138	
B86	9.94	30.970	
B87	10.01	30.920	
B88	9.99	31.000	
B89	9.98	30.815	
B90	10.11	30.904	
B91	9.87	31.165	
B92	10.01	31.059	
B93	10.09	31.108	
B94	10.03	30.961	
B95	10.12	31.118	
B96	10.03	30.896	
B97	9.97	30.953	
B98	9.91	30.874	
B99	10.04	30.771	
B100	10.02	30.889	
B101	9.93	30.947	
B102	10.02	31.354	
B103	9.99	31.103	
B104	10.01	31.004	
B105	10.12	30.928	
B106	9.89	31.064	
B107	10.04	31.028	
B108	10.00	30.950	
B109	10.02	30.979	
B110	9.89	31.017	
B111	10.06	30.996	
B112	9.92	31.199	
B113	10.01	30.987	
B114	10.08	30.955	
B115	10.07	31.045	
B116	10.12	31.150	
B117	9.99	30.960	
B118	9.98	31.205	
B119	9.95	31.056	
B120	9.99	30.825	
B121	9.98	30.951	
B122	9.91	31.062	
B123	9.93	30.932	
B124	10.09	30.853	
B125	9.95	31.005	
B126	9.90	31.165	

ID-Nr. LOT 57130112	Concentration Particle number/mL (x 10 <sup>5</sup> )	weight (g)	Bottle received
B127	9.93	31.089	
B128	9.97	31.002	
B129	10.13	31.096	
B130	10.14	31.058	
B131	9.89	31.165	
B132	10.14	30.997	
B133	10.12	31.047	
B134	10.01	31.005	
B135	10.02	31.014	
B136	9.93	31.088	
B137	10.03	30.946	
B138	9.95	31.239	
B139	9.99	31.231	
B140	9.95	31.064	
B141	10.04	31.261	
B142	9.99	31.119	
B143	9.94	31.198	
B144	10.02	31.119	
B145	9.97	31.242	
B146	9.94	31.153	
B147	10.11	31.121	
B148	9.90	31.119	
B149	9.97	31.260	
B150	10.03	30.989	
B151	10.01	31.303	
B152	10.09	31.544	
B153	9.94	31.410	
B154	10.03	31.173	
B155	10.12	31.034	
B156	10.07	31.004	
B157	9.98	31.174	
B158	10.12	30.936	
B159	9.99	31.114	
B160	9.97	30.878	
B161	10.07	31.173	
B162	10.07	31.291	
B163	10.04	31.053	
B164	10.11	31.310	
B165	10.10	31.155	
B166	9.93	31.053	
B167	10.04	31.063	
B168	10.01	31.163	

ID-Nr. LOT 57130112	Concentration Particle number/mL (x 10 <sup>5</sup> )	weight (g)	Bottle received
B169	10.12	31.110	
B170	9.90	31.237	
B171	9.89	31.230	
B172	10.02	30.864	
B173	9.99	31.219	
B174	9.94	31.239	
B175	9.98	31.099	
B176	9.97	31.016	
B177	10.10	30.953	
B178	10.06	30.827	
B179	10.06	31.147	
B180	10.09	31.406	
B181	10.02	31.366	
B182	10.00	31.474	
B183	9.97	31.020	
B184	10.00	30.992	
B185	9.88	31.144	
B186	10.02	31.086	
B187	10.02	30.981	
B188	9.90	30.970	
B189	9.99	31.129	
B190	10.08	30.964	
B191	10.03	31.264	
B192	10.03	30.925	
B193	10.02	31.490	
B194	9.91	31.094	
B195	9.98	31.067	
B196	10.12	30.970	
B197	10.05	31.342	
B198	10.05	31.025	
B199	10.04	30.907	
B200	9.99	31.135	
B201	9.98	30.806	
B202	10.00	31.506	
B203	10.07	31.038	
B204	10.07	30.853	
B205	10.00	30.826	
B206	10.09	30.968	
B207	9.93	31.181	
B208	9.95	31.243	
B209	10.04	31.119	
B210	10.13	31.021	

ID-Nr. LOT 57130112	Concentration Particle number/mL (x 10 <sup>5</sup> )	weight (g)	Bottle received
B211	9.97	31.201	
B212	9.96	31.180	
B213	10.03	31.163	
B214	10.16	31.221	
B215	10.10	31.031	
B216	9.96	31.014	
B217	9.97	30.869	
B218	9.94	30.926	
B219	10.07	31.151	
B220	10.08	30.876	
B221	9.97	31.274	
B222	9.98	31.049	
B223	10.08	31.000	
B224	10.11	30.860	
B225	9.89	31.242	
B226	9.88	31.119	
B227	10.01	31.188	
B228	10.06	31.098	
B229	10.00	31.104	
B230	9.91	31.300	
B231	9.94	30.985	
B232	10.10	30.924	
B233	10.08	31.039	
B234	9.96	31.052	
B235	9.92	30.914	
B236	10.05	31.026	
B237	10.04	30.937	
B238	10.10	31.073	
B239	10.04	30.886	
B240	10.07	31.112	
B241	10.06	31.132	
B242	10.04	30.874	
B243	9.98	30.883	
B244	9.99	31.039	
B245	10.03	30.894	
B246	10.15	30.770	
B247	10.13	30.959	
B248	10.15	31.004	
B249	10.16	30.921	
B250	9.97	30.883	
B251	10.09	31.158	
B252	9.95	31.103	

#### 4. Lot-Specific Data

ID-Nr. LOT 57130112	Concentration Particle number/mL (x 10 <sup>5</sup> )	weight (g)	Bottle received
B253	10.02	30.867	
B254	10.10	30.846	
B255	10.12	30.866	
B256	10.16	31.213	
B257	10.06	30.875	
B258	10.10	31.055	
B259	10.09	30.829	
B260	9.95	31.051	
B261	10.04	31.021	
B262	10.08	30.977	
B263	10.02	31.014	
B264	9.89	30.793	
B265	9.97	30.801	
B266	10.03	31.003	
B267	10.10	30.846	
B268	10.01	31.017	
B269	10.05	31.815	
B270	10.00	30.824	
B271	10.08	30.943	
B272	10.12	30.812	
B273	10.13	31.038	
B274	10.05	30.849	
B275	9.98	30.916	
B276	10.04	30.971	
B277	9.90	30.823	
B278	10.06	30.829	
B279	9.90	30.798	
B280	9.96	31.136	
B281	9.98	30.954	
B282	9.92	30.999	
B283	9.94	30.988	
B284	10.09	31.259	
B285	9.89	31.079	
B286	10.03	30.950	
B287	10.03	31.163	
B288	10.06	30.962	
B289	10.04	31.013	
B290	9.94	30.990	
B291	10.05	31.082	
B292	10.00	31.102	
B293	10.07	31.090	
B294	10.14	30.869	

ID-Nr. LOT 57130112	Concentration Particle number/mL (x 10 <sup>5</sup> )	weight (g)	Bottle received
B295	9.93	31.113	
B296	10.07	30.968	
B297	9.93	30.714	
B298	10.13	30.799	
B299	10.01	31.088	
B300	10.08	30.778	
B301	10.03	31.046	
B302	10.06	30.931	
B303	10.01	31.140	
B304	10.09	31.009	
B305	10.14	31.024	
B306	9.97	31.114	
B307	9.92	30.934	
B308	9.97	30.969	
B309	9.88	30.978	
B310	10.00	30.849	
B311	10.06	31.078	
B312	10.12	31.123	
B313	10.02	30.859	
B314	10.05	31.052	
B315	9.96	31.095	
B316	10.15	30.796	
B317	10.12	30.746	
B318	9.98	30.959	
B319	9.98	31.024	
B320	10.01	31.172	
B321	10.15	30.967	
B322	10.06	31.055	
B323	10.03	30.939	
B324	9.98	30.839	
B325	9.92	30.908	
B326	10.12	30.798	
B327	9.96	30.663	
B328	10.12	30.800	
B329	10.10	30.942	
B330	10.15	31.101	
B331	10.14	31.116	
B332	10.13	30.901	
B333	10.03	30.879	
B334	9.95	30.867	
B335	10.02	30.857	
B336	9.96	31.069	

ID-Nr. LOT 57130112	Concentration Particle number/mL (x 10 <sup>5</sup> )	weight (g)	Bottle received
B337	9.95	31.052	
B338	9.96	31.095	
B339	9.89	30.920	
B340	10.00	31.049	
B341	10.02	31.151	
B342	10.04	30.984	
B343	9.96	31.101	
B344	10.01	31.159	
B345	9.92	30.652	
B346	10.08	30.883	
B347	10.05	30.885	
B348	10.02	30.868	
B349	9.97	30.660	
B350	9.94	30.979	
B351	10.07	30.814	
B352	10.16	31.140	
B353	10.05	30.977	
B354	10.04	31.129	
B355	10.05	31.119	
B356	9.97	31.214	
B357	10.01	31.128	
B358	10.05	30.811	
B359	10.03	31.133	
B360	9.94	30.823	
B361	10.00	30.802	
B362	10.07	30.894	
B363	10.00	31.009	
B364	10.03	30.848	
B365	10.04	30.957	
B366	9.98	30.710	
B367	10.05	31.108	
B368	10.10	31.223	
B369	9.89	30.803	
B370	10.00	30.855	
B371	10.00	30.905	
B372	10.00	30.987	
B373	10.11	30.713	
B374	10.07	31.086	
B375	10.06	30.764	
B376	10.02	30.977	
B377	10.06	31.045	
B378	10.02	31.054	

ID-Nr. LOT 57130112	Concentration Particle number/mL (x 10 <sup>5</sup> )	weight (g)	Bottle received
B379	10.03	30.855	
B380	9.96	31.131	
B381	10.10	30.913	
B382	10.01	31.142	
B383	9.98	31.178	
B384	10.15	31.137	
B385	10.07	30.911	
B386	10.04	31.022	
B387	10.08	31.041	
B388	10.12	30.805	
B389	9.98	30.957	
B390	9.95	30.999	
B391	10.09	30.935	
B392	10.04	31.105	
B393	9.96	31.069	
B394	10.05	31.023	
B395	10.01	31.044	
B396	10.09	30.797	
B397	10.02	31.228	
B398	9.94	31.153	
B399	10.05	30.976	
B400	10.12	30.737	
B401	10.01	31.089	
B402	10.15	31.079	
B403	10.08	31.198	
B404	9.89	31.070	
B405	9.92	31.053	
B406	10.13	31.074	
B407	10.01	31.066	
B408	10.13	30.997	
B409	10.03	31.289	
B410	9.98	31.138	
B411	10.12	31.066	
B412	10.07	31.023	
B413	10.08	31.220	
B414	10.14	31.111	
B415	10.00	31.327	
B416	10.03	31.465	
B417	10.12	31.061	
B418	10.06	31.217	
B419	10.02	31.317	
B420	9.99	31.109	

#### 4. Lot-Specific Data

ID-Nr. LOT 57130112	Concentration Particle number/mL (x 10 <sup>5</sup> )	weight (g)	Bottle received
B421	10.05	31.244	
B422	9.89	31.184	
B423	9.96	31.122	
B424	10.09	30.916	
B425	9.94	31.216	
B426	10.04	31.301	
B427	10.00	31.078	
B428	9.92	30.964	
B429	9.96	31.079	
B430	10.01	31.092	
B431	10.08	31.026	
B432	9.95	31.294	
B433	9.94	30.674	
B434	10.02	31.089	
B435	9.97	31.138	
B436	9.92	30.801	
B437	9.98	30.921	
B438	10.06	31.021	
B439	10.03	30.770	
B440	9.93	30.751	
B441	9.90	31.004	
B442	9.94	31.008	
B443	9.97	31.013	
B444	10.03	30.922	
B445	10.01	31.020	
B446	10.01	31.149	
B447	10.01	30.964	
B448	9.98	30.909	
B449	10.14	31.127	
B450	10.00	30.986	
B451	9.94	31.002	
B452	9.89	31.061	
B453	9.93	31.113	
B454	9.91	31.181	
B455	9.95	31.043	
B456	9.95	31.125	
B457	9.99	30.944	
B458	9.90	31.327	
B459	10.00	31.329	
B460	10.10	31.107	
B461	9.89	31.207	
B462	10.05	31.191	

ID-Nr. LOT 57130112	Concentration Particle number/mL (x 10 <sup>5</sup> )	weight (g)	Bottle received
B463	10.15	31.310	
B464	10.00	31.246	
B465	10.06	31.082	
B466	9.99	31.174	
B467	9.88	31.200	
B468	9.92	31.237	
B469	9.88	31.097	
B470	9.91	31.377	
B471	10.09	31.274	
B472	10.06	31.450	
B473	10.02	31.237	
B474	9.95	31.207	
B475	9.97	31.431	
B476	9.90	31.117	
B477	10.01	31.354	
B478	10.00	31.285	
B479	9.95	31.097	
B480	10.05	31.113	
B481	9.95	31.117	
B482	9.99	31.108	
B483	9.96	31.243	
B484	9.93	31.293	
B485	10.05	31.270	
B486	10.03	31.021	
B487	10.09	31.025	
B488	9.97	31.376	
B489	9.91	31.224	
B490	9.99	31.163	
B491	9.91	31.351	
B492	9.93	31.053	
B493	9.90	30.923	
B494	9.94	31.212	
B495	10.04	31.067	
B496	9.97	31.276	
B497	9.91	31.279	
B498	9.94	31.181	
B499	9.97	30.979	
B500	9.95	31.440	
B501	9.97	31.278	
B502	9.98	31.195	
B503	9.87	31.301	
B504	10.09	31.127	

ID-Nr. LOT 57130112	Concentration Particle number/mL (x 10 <sup>5</sup> )	weight (g)	Bottle received
B505	9.97	31.133	
B506	10.03	30.899	
B507	10.14	31.164	
B508	10.03	31.563	
B509	10.04	31.073	
B510	10.03	31.196	
B511	9.93	31.165	
B512	10.12	31.011	
B513	10.03	31.294	
B514	10.00	31.338	
B515	9.88	31.326	
B516	10.03	31.229	
B517	9.90	31.145	
B518	9.96	31.133	
B519	9.98	31.308	
B520	9.92	31.385	
B521	10.03	31.275	
B522	10.04	31.134	
B523	10.11	31.103	
B524	10.09	31.291	
B525	10.00	31.467	
B526	9.93	31.199	
B527	10.01	31.278	
B528	9.89	31.146	
B529	10.00	31.218	
B530	10.12	31.005	
B531	9.95	31.438	
B532	9.92	30.917	
B533	9.89	31.128	
B534	10.00	31.060	
B535	9.90	30.936	
B536	9.97	30.958	
B537	9.90	30.908	
B538	9.90	30.950	
B539	9.93	30.942	
B540	9.98	31.233	
B541	9.99	30.862	
B542	9.89	30.899	
B543	9.92	31.047	
B544	9.91	31.234	
B545	9.94	31.030	
B546	10.00	30.829	

ID-Nr. LOT 57130112	Concentration Particle number/mL (x 10 <sup>5</sup> )	weight (g)	Bottle received
B547	9.93	31.022	
B548	9.99	31.175	
B549	10.01	30.975	
B550	9.93	31.043	
B551	9.95	31.008	
B552	10.09	31.006	
B553	10.08	30.937	
B554	10.11	30.913	
B555	9.98	31.014	
B556	10.10	30.898	
B557	10.06	31.069	
B558	9.95	30.927	
B559	9.98	31.053	
B560	10.08	30.191	



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