



**Abvigen Inc**

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## Gold Nanoparticles NPS- 2.5%

| Diameter<br>(um) | Particle<br>Volume<br>(nm3) | Volume<br>(ml) | Wt.Conc.<br>(mg/ml) | Particle<br>Mass(g) | NPS/mg   | NPS/ml   | Conc.<br>(nmol/ml) |
|------------------|-----------------------------|----------------|---------------------|---------------------|----------|----------|--------------------|
| 0.01             | 5.24E+02                    | 10             | 25                  | 1.01E-17            | 9.89E+13 | 2.47E+15 | 4.10E+00           |
| 0.02             | 4.19E+03                    | 10             | 25                  | 8.09E-17            | 1.24E+13 | 3.09E+14 | 5.13E-01           |
| 0.03             | 1.41E+04                    | 10             | 25                  | 2.73E-16            | 3.66E+12 | 9.15E+13 | 1.52E-01           |
| 0.04             | 3.35E+04                    | 10             | 25                  | 6.47E-16            | 1.54E+12 | 3.86E+13 | 6.41E-02           |
| 0.05             | 6.54E+04                    | 10             | 25                  | 1.26E-15            | 7.91E+11 | 1.98E+13 | 3.28E-02           |
| 0.07             | 1.80E+05                    | 10             | 25                  | 3.47E-15            | 2.88E+11 | 7.21E+12 | 1.20E-02           |
| 0.08             | 2.68E+05                    | 10             | 25                  | 5.18E-15            | 1.93E+11 | 4.83E+12 | 8.02E-03           |
| 0.1              | 5.24E+05                    | 10             | 25                  | 1.01E-14            | 9.89E+10 | 2.47E+12 | 4.10E-03           |
| 0.2              | 4.19E+06                    | 10             | 25                  | 8.09E-14            | 1.24E+10 | 3.09E+11 | 5.13E-04           |
| 0.3              | 1.41E+07                    | 10             | 25                  | 2.73E-13            | 3.66E+09 | 9.15E+10 | 1.52E-04           |
| 0.4              | 3.35E+07                    | 10             | 25                  | 6.47E-13            | 1.54E+09 | 3.86E+10 | 6.41E-05           |
| 0.5              | 6.54E+07                    | 10             | 25                  | 1.26E-12            | 7.91E+08 | 1.98E+10 | 3.28E-05           |
| 0.6              | 1.13E+08                    | 10             | 25                  | 2.19E-12            | 4.58E+08 | 1.14E+10 | 1.90E-05           |
| 0.7              | 1.80E+08                    | 10             | 25                  | 3.47E-12            | 2.88E+08 | 7.21E+09 | 1.20E-05           |
| 0.8              | 2.68E+08                    | 10             | 25                  | 5.18E-12            | 1.93E+08 | 4.83E+09 | 8.02E-06           |
| 0.9              | 3.82E+08                    | 10             | 25                  | 7.37E-12            | 1.36E+08 | 3.39E+09 | 5.63E-06           |
| 1                | 5.24E+08                    | 10             | 25                  | 1.01E-11            | 9.89E+07 | 2.47E+09 | 4.10E-06           |

|    |          |    |    |          |          |          |          |
|----|----------|----|----|----------|----------|----------|----------|
| 2  | 4.19E+09 | 10 | 25 | 8.09E-11 | 1.24E+07 | 3.09E+08 | 5.13E-07 |
| 3  | 1.41E+10 | 10 | 25 | 2.73E-10 | 3.66E+06 | 9.15E+07 | 1.52E-07 |
| 4  | 3.35E+10 | 10 | 25 | 6.47E-10 | 1.54E+06 | 3.86E+07 | 6.41E-08 |
| 5  | 6.54E+10 | 10 | 25 | 1.26E-09 | 7.91E+05 | 1.98E+07 | 3.28E-08 |
| 6  | 1.13E+11 | 10 | 25 | 2.19E-09 | 4.58E+05 | 1.14E+07 | 1.90E-08 |
| 7  | 1.80E+11 | 10 | 25 | 3.47E-09 | 2.88E+05 | 7.21E+06 | 1.20E-08 |
| 8  | 2.68E+11 | 10 | 25 | 5.18E-09 | 1.93E+05 | 4.83E+06 | 8.02E-09 |
| 9  | 3.82E+11 | 10 | 25 | 7.37E-09 | 1.36E+05 | 3.39E+06 | 5.63E-09 |
| 10 | 5.24E+11 | 10 | 25 | 1.01E-08 | 9.89E+04 | 2.47E+06 | 4.10E-09 |
| 11 | 6.97E+11 | 10 | 25 | 1.35E-08 | 7.43E+04 | 1.86E+06 | 3.08E-09 |
| 12 | 9.05E+11 | 10 | 25 | 1.75E-08 | 5.72E+04 | 1.43E+06 | 2.37E-09 |
| 13 | 1.15E+12 | 10 | 25 | 2.22E-08 | 4.50E+04 | 1.12E+06 | 1.87E-09 |
| 14 | 1.44E+12 | 10 | 25 | 2.78E-08 | 3.60E+04 | 9.01E+05 | 1.50E-09 |
| 15 | 1.77E+12 | 10 | 25 | 3.41E-08 | 2.93E+04 | 7.32E+05 | 1.22E-09 |
| 17 | 2.57E+12 | 10 | 25 | 4.97E-08 | 2.01E+04 | 5.03E+05 | 8.35E-10 |
| 18 | 3.05E+12 | 10 | 25 | 5.90E-08 | 1.70E+04 | 4.24E+05 | 7.04E-10 |
| 20 | 4.19E+12 | 10 | 25 | 8.09E-08 | 1.24E+04 | 3.09E+05 | 5.13E-10 |
| 22 | 5.58E+12 | 10 | 25 | 1.08E-07 | 9.28E+03 | 2.32E+05 | 3.85E-10 |
| 23 | 6.37E+12 | 10 | 25 | 1.23E-07 | 8.12E+03 | 2.03E+05 | 3.37E-10 |
| 24 | 7.24E+12 | 10 | 25 | 1.40E-07 | 7.15E+03 | 1.79E+05 | 2.97E-10 |
| 25 | 8.18E+12 | 10 | 25 | 1.58E-07 | 6.33E+03 | 1.58E+05 | 2.63E-10 |
| 30 | 1.41E+13 | 10 | 25 | 2.73E-07 | 3.66E+03 | 9.15E+04 | 1.52E-10 |
| 40 | 3.35E+13 | 10 | 25 | 6.47E-07 | 1.54E+03 | 3.86E+04 | 6.41E-11 |
| 50 | 6.54E+13 | 10 | 25 | 1.26E-06 | 7.91E+02 | 1.98E+04 | 3.28E-11 |
| 60 | 1.13E+14 | 10 | 25 | 2.19E-06 | 4.58E+02 | 1.14E+04 | 1.90E-11 |

|      |          |    |    |          |          |          |          |
|------|----------|----|----|----------|----------|----------|----------|
| 70   | 1.80E+14 | 10 | 25 | 3.47E-06 | 2.88E+02 | 7.21E+03 | 1.20E-11 |
| 80   | 2.68E+14 | 10 | 25 | 5.18E-06 | 1.93E+02 | 4.83E+03 | 8.02E-12 |
| 90   | 3.82E+14 | 10 | 25 | 7.37E-06 | 1.36E+02 | 3.39E+03 | 5.63E-12 |
| 100  | 5.24E+14 | 10 | 25 | 1.01E-05 | 9.89E+01 | 2.47E+03 | 4.10E-12 |
| 200  | 4.19E+15 | 10 | 25 | 8.09E-05 | 1.24E+01 | 3.09E+02 | 5.13E-13 |
| 300  | 1.41E+16 | 10 | 25 | 2.73E-04 | 3.66E+00 | 9.15E+01 | 1.52E-13 |
| 400  | 3.35E+16 | 10 | 25 | 6.47E-04 | 1.54E+00 | 3.86E+01 | 6.41E-14 |
| 500  | 6.54E+16 | 10 | 25 | 1.26E-03 | 7.91E-01 | 1.98E+01 | 3.28E-14 |
| 600  | 1.13E+17 | 10 | 25 | 2.19E-03 | 4.58E-01 | 1.14E+01 | 1.90E-14 |
| 700  | 1.80E+17 | 10 | 25 | 3.47E-03 | 2.88E-01 | 7.21E+00 | 1.20E-14 |
| 800  | 2.68E+17 | 10 | 25 | 5.18E-03 | 1.93E-01 | 4.83E+00 | 8.02E-15 |
| 900  | 3.82E+17 | 10 | 25 | 7.37E-03 | 1.36E-01 | 3.39E+00 | 5.63E-15 |
| 1000 | 5.24E+17 | 10 | 25 | 1.01E-02 | 9.89E-02 | 2.47E+00 | 4.10E-15 |
| 2000 | 4.19E+18 | 10 | 25 | 8.09E-02 | 1.24E-02 | 3.09E-01 | 5.13E-16 |