

Cycle: 20 minutes in between loads

Physical Description of Sample: Gravity Filter

Performance Indicator Device: No, test to 100% flow reduction

Test Description: NSF/ANSI Std. 53 – Microplastic Reduction Testing, Fibers >10 microns

Trade Designation/Model Number: Gravity Filter

Unit Volume: 0.1 L

Performance Standard: Modified NSF/ANSI Std. 53 – 2019

Pass/Fail Criteria:

Decision Rule: Simple Acceptance based on the NSF/ANSI standard limit

General Test Water Characteristics Filter 1 and 2.

| Sample Point % Flow Reduction | Hardness (<170 mg/L) | pH (7.5±0.5) | Temperature (20±3°C) | TDS (200 to 500 mg/L) | Turbidity (<1 NTU) |
|----------------------------------|-------------------------|--------------|-------------------------|-----------------------------|-----------------------|
| Start | 110 | 7.5 | 18.2 | 250 | 0.5 |
| 25% | 110 | 7.6 | 18.4 | 255 | 0.5 |
| 50% | 112 | 7.5 | 18.5 | 260 | 0.4 |
| 75% | 114 | 7.6 | 18.3 | 255 | 0.5 |

Test Dust Loading Water Characteristics Filter 1 and 2.

| Sample Point % Flow Reduction | Turbidity (Minimum 10 NTU) |
|----------------------------------|-------------------------------|
| Start | 11 |
| 25% | 11 |
| 50% | 12 |
| 75% | 11 |

| Sample Point % Flow Reduction | Influent 1 Microplastic/L | Effluent 1 Microplastic/L | % Reduction |
|----------------------------------|------------------------------|------------------------------|----------------|
| Start | 120,000 | 2 | 99.9983% |
| 25% | 124,000 | 4 | 99.9968% |
| 50% | 136,000 | 10 | 99.9926% |
| 75% | 142,500 | 50 | 99.9649% |