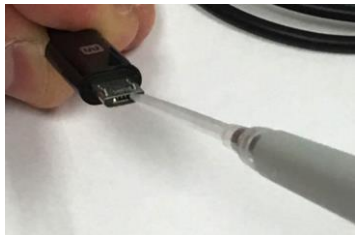
Powered immersion corrosion + durability test:
Connector/Product level testing

Xtalic Test method

1. Initial optical imaging
2. Inject 20µL of artificial perspiration into cable connector opening
   - Pickering #1700-0020
3. Mate with device connector, place in horizontal position
4. Apply power between V_{BUS} and GND contacts for 10 minutes
   - Typically 5Vx1A = 5W, other common biases are 9, 12, 15 and 20V
5. Mate/unmate connector 25 times
6. Optical imaging and check power/ground bias
7. Repeat steps 1-6 until failure, failure = exposure of base metal

Notes:
- 0.75 um Au/Ni PoR cables used for testing device side connectors
- Replace cable every 2-3 cycles to minimize failure due to cable side connector overheating
- Corrosion product must be removed from contacts in order to determine if corrosion failure is from device side or cable side

2. Injecting artificial perspiration



3. Mated connectors for IC test