Polished Steel Target Cleaning Quick Reference Guide: Trifluoroacetic Acid and Ethanol

**Principle:** The Polished Steel Target needs to be cleaned after use to remove any protein and matrix residue. The target may be cleaned once all the spots have been used; it is not necessary to clean daily if the target is not completely utilized. This document is intended to be used as a reference guide only. Please refer to procedure for important safety information.

**Materials Needed:**

1. Glass Crystallizing Dish or equivalent (8 X 4 cm) OPTIONAL or papertowels
2. 70 % Ethanol (squeeze bottle if available)
3. Distilled or filtered water (squeeze bottle if available)
4. 80% Trifluoroacetic Acid
5. Eppendorf Pipette/Tips
6. Kimwipes
7. Paper towels
8. Laboratory sink
9. Chemical Hood and Gloves

**Procedure:**

1. Transfer the MSP target to a crystallizing dish (8 x 4 cm) or a small stack of paper towels under the hood.
2. Overlay the surface of the target with 70% aqueous ethanol using squeeze bottle; incubate (5) minutes
3. Wipe surface with Kimwipe; rinse with water
4. Wipe surface of target with 70% aqueous ethanol and Kimwipe
5. Rinse the target with deionized water and dry with Kimwipe
6. Cover the target with a layer of 100 µL of 80% aqueous trifluoroacetic acid and wipe intensively (work under a chemical hood and wear chemical safe gloves!)
7. Rinse the target with deionized water and wipe it dry with a Kimwipe.
8. Let the target completely dry for at least 15 minutes at room temperature before use

**Notes:**

1. ALWAYS work under a chemical hood and wear chemical safe gloves when working with trifluoroacetic acid
2. Prevent the immersion of the target into ethanol or acid; simply overlay the surface with chemicals
3. Protect the surface of the target from scratching by storing in the shipping containers provided by Bruker Daltonics

**All statements and applications pertaining to the MBT Biotyper are for research use only**