

# Best Practices Cleaning Guide for Fiber Optic Splicing

## Why Cleaning is Important

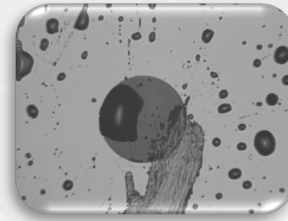
Proper cleaning techniques are critical for the reliable performance of optical networks. Careful adherence to cleaning protocols, use of quality cleaning products and equipment, and inspections after cleaning ensure that networks are maintained for optimum reliability and longevity.

## Proper cleaning prevents:

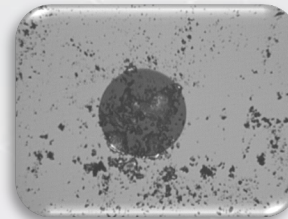
- Signal degradation
- Cross-contamination
- Scratches and other physical damage

## Common Contaminants:

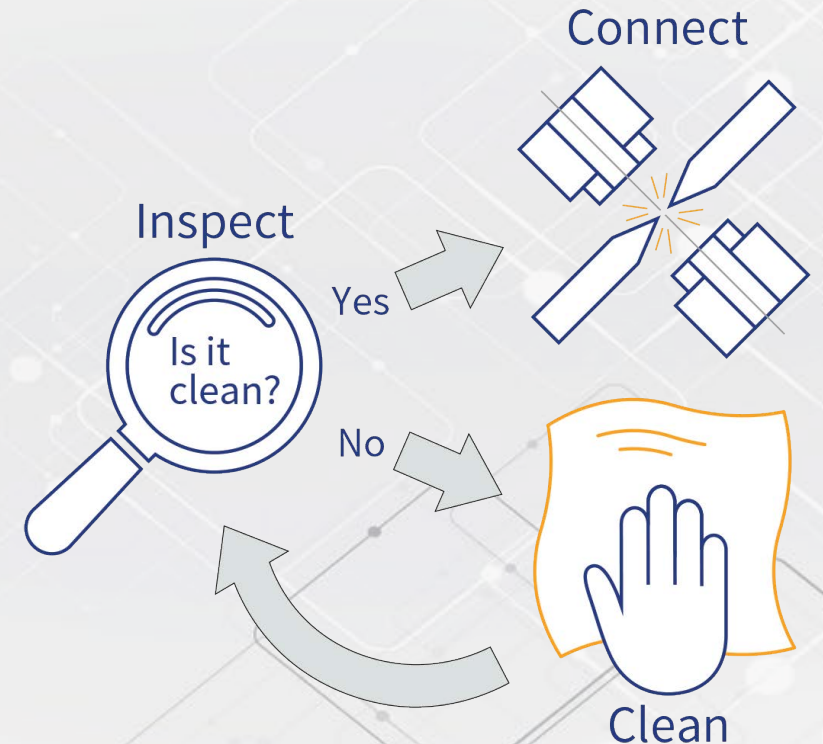
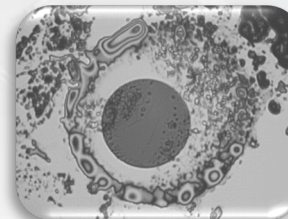
Oils (including fingertip oils)



Gypsum dust



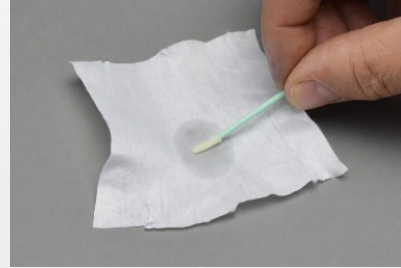
Gypsum dust and buffer gel



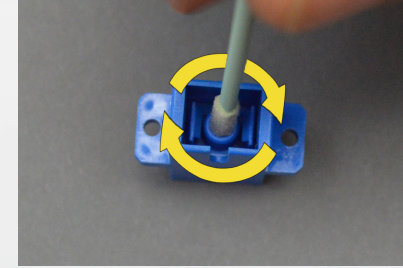
# How to Clean the Alignment Adapter



1. Select correct size of cleaning swab. Open swab bag by cutting a small corner of the bag at the handle end. This allows you to remove a swab without touching the swab end.



2. Wet a non-linting towel with 1-2 drops of Polywater AquaKleen. Dampen the swab tip by gently dabbing it onto the wet area of the towel.



3. Insert a swab tip into the alignment adapter and clean with a twisting motion. Turn swab several complete revolutions in the same direction.



4. Dry alignment adapter with a new, clean swab.

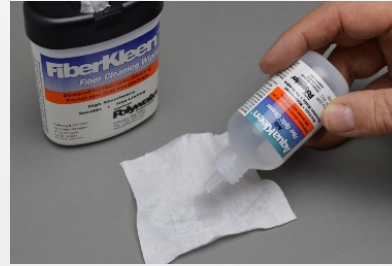
## Caution:

- Never touch the swab tip
- Never reuse a swab
- Do not use cotton swabs
- Avoid skin contact with the towel
- Do not use compressed air
- Keep work area, equipment, and hands clean

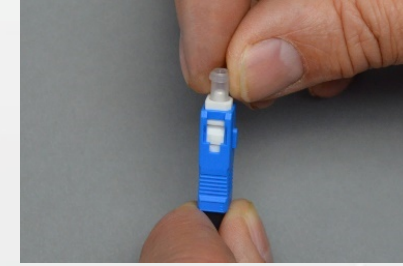
# How to Clean the Endface



1. Flatten 3-4 non-linting towels, or alternatively, flatten a non-linting towel over an elastomer (soft) surface.



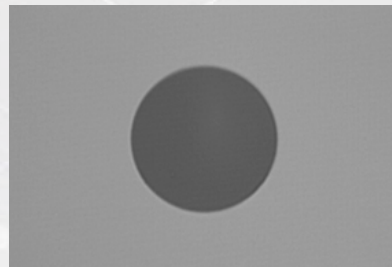
2. Wet towel with 1-2 drops of Polywater AquaKleen at least ½ -inch (13 mm) from the edge. Create a damp spot approximately ½ -inch (13 mm) in diameter.



3. Remove the dust cap.



4. Place the endface squarely over the damp area of the towel and wipe in a straight line from wet to dry areas.

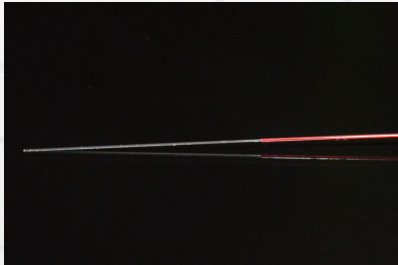


5. Test connection quality and repeat cleaning as necessary, until no contamination is evident.

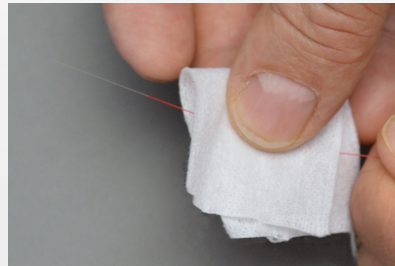
## Caution:

- Use a soft surface for your wiping tasks
- The dust cap is for physical protection and does not keep out contamination
- Always wipe in straight lines
- Do not use “figure 8” or twisting motions
- With each pass, use a new part of the towel

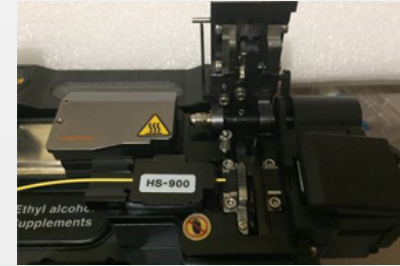
# How to Prepare the Splice



1. Use a stripping tool to remove the fiber end coating approximately 1 inch (25 mm) from the tip.



2. Add one drop of Polywater AquaKleen to a non-linting towel and set the stripped fiber into the wet section. Firmly squeeze the towel around the fiber, cleaning towards the tip.



3. Cleave the fiber. Secure the fiber with clamps or holders and insert into the V-groove. Do not touch or clean the cleaved surface



4. Repeat steps 1-3 for the second fiber end (either cable or connector). Secure the fiber and insert into the opposite V-groove.



5. Align and splice the fibers using the arc splicing machine.

## Caution:

- Make sure work area, equipment, and hands are clean
- Always use non-linting towel
- Never reuse a towel



Polywater's AQ-KIT3 contains  
2 – AQ-2DR (2 fl. oz. dropper bottles)  
1 – DT-D175 (175-count non-linting towel dispenser)  
1 – SWB-250F100 (100-count 2.5mm cleaning swabs)