

# KeySplint Finishing and Polishing Recommendations<sup>1</sup>

For KeySplint Soft and KeySplint Hard

NOTE: Keystone Industries recommends polishing only the edges and occlusal surfaces of a KeySplint night guard or splint. Polishing the intaglio surface can adversely impact the fit of the printed device.

## SUPPORT REMOVAL



### PROCESS

 **TIME: APPROX. 2 MIN**

- Grind supports down with a Scotch-Brite Dremel bit
- Optional: you can take steps to remove remaining printing lines/texture from print with an Abrasion Disc sanding wheel (Fine Blue)
- This process is fast and can eliminate any trace of scaling on the edges and the occlusal surfaces prior to polishing (below). This makes polishing process quicker, more consistent, and with limited defects

### MATERIALS

- Mini Scotch Brite™ (1670092) – removal of support pin marks
- 400 Grit Blue Disc (1670099) - elimination of remnant print lines and residual material from surface

## POLISHING



### STEP 1: PUMICE

 **TIME: APPROX. 2 MIN**

- Fill lighted shield tray with pumice
- Add sufficient water so that the pumice is more than damp and slightly flowable to make reapplication of pumice during polishing easier
- Use the 4x42 cloth wheel surface to reach all edges and occlusal surfaces.
- Dampen the wheel with some water before pumice application for optimal results
- Coat the part in pumice and begin to finish the occlusal surface. You will feel some resistance of the pumice between the part and wheel, and as the resistance lessens, the process is nearing completion
- Do not apply too much pressure. Firm and consistent pressure is recommended for consistent and predictable results

### MATERIALS

- Coarse pumice, or synthetic pumice substitute
- Muslin Buffs (4x42) (1180170) - larger and flatter surface area is best

<sup>1</sup>There are a variety of polishing methods and materials that effectively can finish and high-shine polish a KeySplint device. In this protocol, Keystone Industries describes several steps and materials to be used to achieve a high-shine finish on printed KeySplint devices. Keystone Industries is grateful for the helpful guidance and suggestions made by Protec Dental Laboratory in Vancouver, Canada in assisting Keystone to develop these polishing recommendations.



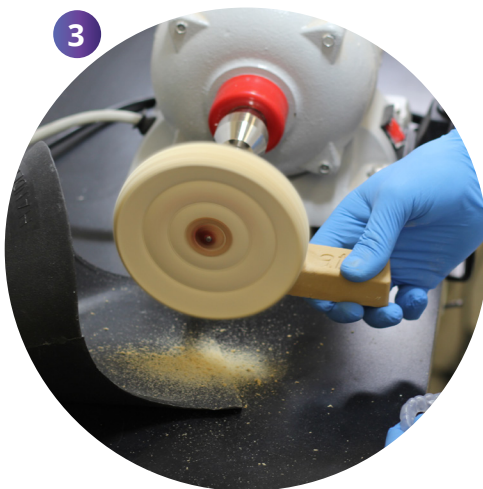
## STEP 2: PRE-POLISH

 **TIME: APPROX. 2 MIN**

- Remove pumice wheel from prior step, clean pumice from work area and from the printed part (brief high-pressure steam cleaning works well)
- Install 5x45 cloth wheel dedicated to Tripoli material
- Apply Tripoli compound to the wheel until fully coated and repeat as necessary through the process
- Begin to pre-polish the device by applying firm pressure as you pre-polish the entire occlusal surface, looking to achieve a uniform finish with slight shine
- Re-apply Tripoli compound and perform one final pre-polishing of the surface, applying light pressure

### MATERIALS

- Tripoli polishing compound (1660030)
- Muslin Buffs (5x45) (1180190) - larger and flatter surface area is best



## STEP 3: HIGH-SHINE POLISH

 **TIME: APPROX. 2 MIN**

- Remove Tripoli wheel from prior step, clean Tripoli residue from the printed part (brief high-pressure steam cleaning works well)
- Install new 5x45 cloth wheel dedicated to high-shine materials
- Apply high-shine polishing compound to the wheel until fully coated and repeat as necessary through the process
- Begin to polish the device by applying firm pressure as you polish the entire occlusal surface, looking to achieve a uniform finish with a high shine
- Re-apply high-shine polishing compound and perform one final polishing of the surface, applying light pressure

### ALTERNATIVE STEP 3

 **TIME: APPROX. 3 MIN**

- Instead of using the a high-shine compound bar, you can use something like a High-Shine Emulsion Liquid
- Rather than applying this material to the wheel, you apply the liquid to the part with approximately 4 drops per side of the device and spread the liquid over the entire surface
- Polish the device as recommended above

### MATERIALS

- Polishing options:
  - Beige Polishing Paste 100 g (1670175)
  - Other available light or white dental high-shine polishing compounds
  - High-Shine Emulsion Liquid (1670200)
- Muslin Buffs (5x45) (1180190) - larger and flatter surface area is best



#### STEP 4: HIGH-GLOSS BUFF (OPTIONAL)

 TIME: APPROX. 1 MIN

- Remove polishing wheel from prior step, clean residue from the printed part (brief high-pressure steam cleaning works well)
- Install new cotton buff wheel
- Apply the High-Shine Polistar Pink compound to the wheel until fully coated and repeat as necessary through the process
- Begin to mirror finish the device by applying steady pressure
- Should have a spectacularly bright shine

#### MATERIALS

- High-Shine Polistar Pink 150 g (1670546) for mirror finish
- High-Shine Cotton Buff (1670510)

#### OPTIONAL STEP 4

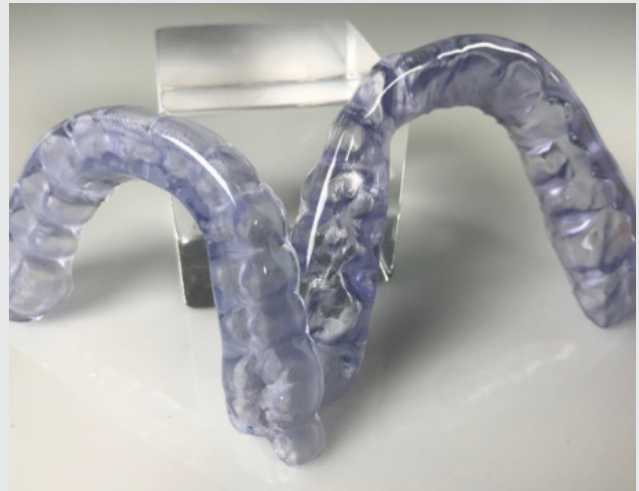
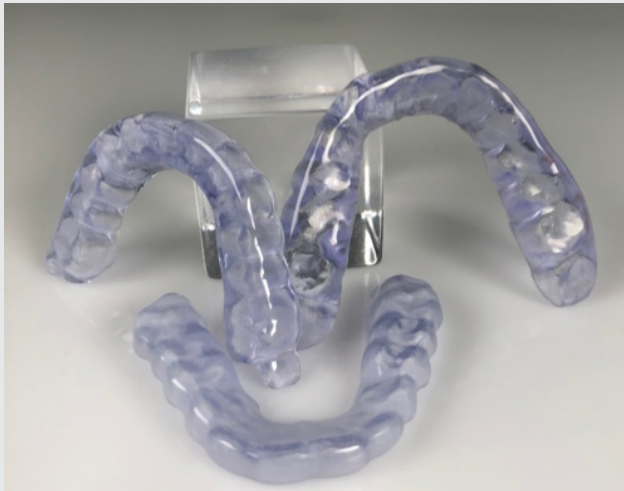
 TIME: APPROX. 1 MIN

- Using a small brush or paper towel, gently apply a light coat of generic mineral oil to the intaglio surface of the splint
- Mineral Oil is used to eliminate cloudiness in the intaglio surface, creating a clear and shiny splint

#### MATERIALS

- Generic Mineral Oil

## HIGH-GLOSS BUFF SPLINTS



## PURCHASING POLISHING MATERIALS

Keystone Industries provides all materials and items needed for a perfect high-shine polish of KeySplint through your preferred distributor.



**BEFORE: UNPOLISHED**



**AFTER: POLISHED**

# KeyPolish™

## POLISHING FINISH KIT

The KeyPolish™ kit has everything you need to follow our KeySplint polishing guide, including paste, polishing compound, discs, and wheels.



### KIT CONTENTS

### ITEM NUMBER

|                               |          |
|-------------------------------|----------|
| Mini Scotch Brite™            | #1670092 |
| 400 Grit Blue Disc            | #1670099 |
| Muslin Buffs (4x42)           | #1180170 |
| Muslin Buffs (5x45)           | #1180190 |
| Tripoli Polishing Compound    | #1660030 |
| Beige Polishing Paste 100g    | #1670175 |
| High-Shine Cotton Buff        | #1670510 |
| High-Shine Polistar Pink 150g | #1670546 |

