

# BUFF & POLISH

## INTRODUCTION

1. Many stones polish equally well with several buff and polishing compound combinations. A very hard gem can be polished by a much softer polish powder. Only one polishing agent should be used on a buff.
2. Polishing does not remove any material from the surface. If scratches develop, the stone must be re-sanded.
3. It is impossible to obtain a high glossy finish on very soft materials, especially if they tend to be slightly porous, fibrous, or granular. As a last resort with this type of material, a finish gloss can be given by the use of spray varnish.

## POLISHING COMPOUNDS

**CERIUM OXIDE:** Covington cerium oxide will polish at a faster rate than conventional polishing compounds and produce a superior optical lens surface with no staining or caking. Because it will polish faster, a lower concentration can be used. It is recommended for use on leather, felt, polyurethane foams, and thermoplastic polishing pads. It is a favored polish for quartz type minerals and other gemstone types. It is not recommended for gemstones that will under cut.

**LINDE "A":** A .3 micron aluminum powder that is carefully graded for uniformity of grain size. It is excellent for polishing stones that will under cut. Excellent for hard to polish stones.

**CHROMIUM OXIDE:** Chromium oxide is a hard polishing agent. It is green in color and stains badly. It is useful for polishing jade and stones that will under cut.

**TIN OXIDE:** Tin oxide is an excellent general-purpose polish. It is used to provide a final high gloss finish.

**DIAMOND:** Diamond grit is the most efficient polishing medium. It is especially useful for polishing difficult-to-polish stones.

## BUFFS

**CANVAS:** Canvas is useful when polishing heat-sensitive stones because it develops very little friction.

**MUSLIN:** Muslin buffs are recommended for soft stones and gems that are heat-sensitive.

**LEATHER:** Leather is a versatile buffing material that is both efficient and economical. Leather generates heat, but

not as much as felt.

**FELT:** Felt is useful for polishing glass and stones of even texture. It is not recommended for gemstones that under cut. Friction on felt generates heat rapidly.

**PHENOLIC:** Phenolic tools or phenolic lap disc (cab laps) are useful when impregnated with diamond grit. 14,000 Micron (pre-polish) or 50,000 Micron (polish) diamond compound can be applied to the surface of the gemstone and worked with a phenolic carving tool. It can also be applied to the surface of a phenolic lap disc and worked with the gemstone mounted at the end of a dop stick. The diamond will charge the phenolic plate making smoothing and polishing easier.

Material	Best	Next Best	Third Best
Agate	Felt & Cerium	Leather & Cerium	Phenolic & Cerium
Amethyst	Felt & Cerium	Leather & Cerium	Phenolic & Cerium
Beryl	Felt & Cerium	Leather & Linde 'A'	Leather & Chrome Oxide
Calcite	Muslin & Tin Oxide	Leather & Tin Oxide	N/A
Chloastrolite	Felt & Cerium	N/A	N/A
Feldspar	Felt & Cerium	N/A	N/A
Garnet	Felt & Chrome Oxide	Felt & Cerium	Phenolic & Diamond
Glass	Felt & Cerium	N/A	N/A
Goldstone	Felt & Cerium	N/A	N/A
Hematite	Muslin & Cerium	Canvas & Linde 'A'	N/A
Howlite	Felt & Tin Oxide	Leather & Linde 'A'	N/A
Jadeite	Leather & Linde 'A'	Leather & Chrome Oxide	Muslin & Tin Oxide
Jasper	Felt & Cerium	Leather & Linde 'A'	N/A
Lapis Lazuli	Leather & Linde 'A'	Leather & Chrome Oxide	N/A
Malachite	Leather & Linde 'A'	Leather & Chrome Oxide	N/A
Nephrite-Jade	Leather & Linde 'A'	Leather & Chrome Oxide	Muslin & Tin Oxide
Obsidian	Felt & Cerium	N/A	N/A
Opal-Australian	Felt & Cerium	Muslin & Tin Oxide	N/A
Opal-Mexican	Phenolic & Diamond	N/A	N/A
Psilomelane	Leather & Linde 'A'	Leather & Tin Oxide	N/A
Petosky Stone	Canvas & Tin Oxide	N/A	N/A
Quartz	Felt & Cerium	Leather & Cerium	Phenolic & Diamond
Rhodochrosite	Leather & Linde 'A'	Leather & Tin Oxide	N/A
Rhodonite	Leather & Linde 'A'	Leather & Cerium	N/A
Serpentine	Leather & Linde 'A'	Leather & Tin Oxide	N/A
Sodalite	Felt & Cerium	N/A	N/A
Thomsonite	Felt & Cerium	N/A	N/A
Tigers Eye	Leather & Linde 'A'	N/A	N/A
Tourmaline	Leather & Linde 'A'	Leather & Chrome Oxide	Canvas & Diamond
Turquoise	Leather & Linde 'A'	Leather & Tin Oxide	N/A
Unakite	Felt & Cerium	N/A	N/A
Variscite	Leather & Linde 'A'	Felt & Cerium	Felt & Tin Oxide
Wonderstone	Leather & Linde 'A'	Felt & Cerium	Felt & Tin Oxide

\*\*Covington carries several grades of cerium oxide. We generally recommend the standard pink C85 cerium for general purposes and inexperienced users. The super and platinum ceriums are more finely graded by size and are an excellent choice for users with more experience. Both soft and hard glass can be polished using the felt and cerium.

\*\*If you don't see your material in the chart, we recommend starting with one of the more inexpensive polishes and testing small pieces to test results. Keep a journal of your results so you can track which items work best for your materials.

\*\*Remember, these recommendations are guidelines and not hard and fast rules. Results will vary depending on the user methods. Items that are not ground, tumbled, or pre-polished properly are not likely to have good polishing results.