

Polishing Compounds & Their Uses

A Silversmithing & Metalworking Reference Guide

Choosing the correct polishing compound is one of the most important decisions in any metalworking or silversmithing project. Using the wrong compound can scratch a soft metal surface, leave behind unwanted residue, or fail to cut through oxidation on harder alloys. Each compound is engineered for a specific range of materials and a specific stage in the polishing sequence — starting too fine, or finishing too coarse, will cost you time and may damage your piece irreparably. This guide provides a clear, practical reference for each compound in the standard lineup, helping you select the right product for the right metal at the right stage of your work.

Key Principle: Always work from coarse to fine — and never mix compounds on the same buffing wheel. Use a dedicated wheel for each compound to prevent cross-contamination.

1. Black Emery



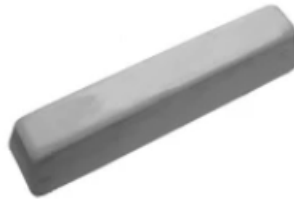
Black Emery bar — coarse abrasive for heavy cutting on hard metals

Black Emery is the most aggressive compound in the polishing lineup, designed for use at the very beginning of the polishing process. Its coarse abrasive action cuts down rough, unfinished, or heavily

oxidized surfaces quickly, making it the essential first step when significant material removal is required before finer compounds are applied.

- **Use:** Coarse cutting and surface preparation
- **Best for:** Aluminum, stainless steel, horn, wood
- **Avoid on:** Plastics, gold

2. White Diamond



White Diamond bar — medium-coarse compound for scratch removal on soft metals

White Diamond is coarser than Red Rouge and is used to remove deeper scratches from soft metals. It bridges the critical gap between heavy cutting compounds and final finishing, bringing the surface to a refined, even state that is ready for a final polish. Particularly effective on aluminum, gold, silver, brass, and copper.

- **Use:** Removing deep scratches; polishing soft metals
- **Best for:** Aluminum, gold, silver, brass, copper

3. Brown Tripoli



Brown Tripoli bar — versatile medium-cut compound for aluminum, steel, and wood

Brown Tripoli is the workhorse of the compound lineup — a popular, all-purpose cutting compound that removes scratches efficiently while bringing out a high luster on the surface. It works especially well on wood and metal before a final buff, making it one of the most frequently reached-for bars in a silversmithing studio. Its balanced cut makes it suitable for both initial prep and pre-finish work.

- **Use:** Cutting, scratch removal, and high-luster preparation
- **Best for:** Aluminum, stainless steel, wood



4. Green Stainless



Green Stainless bar — hard compound for mirror finish on stainless steel

Green Stainless is specifically formulated to bring stainless steel and other hard metals to a brilliant, mirror-like finish. Its abrasive composition is tuned for the hardness of stainless steel, making it highly effective where other compounds fall short. It is not suitable for soft metals or plastics and should be reserved exclusively for hard-metal applications.

- **Use:** Mirror-like finish on hard metals
- **Best for:** Stainless steel and other hard metals

- **Avoid on:** Plastics, silver
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5. Red Rouge



Red Rouge bar — fine iron oxide polish for gold, silver, and soft metals

Red Rouge is the go-to final finishing compound for soft metals and the staple of every jeweler's bench. Extremely fine and gentle, it will not scratch even the softest metals. It polishes gold, silver, brass, copper, and nickel to a brilliant mirror finish with a warm, rich luster. Because Red Rouge is so fine, it is critical to dedicate a separate buffing wheel exclusively to this compound — even trace amounts of a coarser compound contaminating the wheel will introduce scratches into your final finish.

- **Use:** Final buffing and high-luster finishing
 - **Best for:** Gold, silver, brass, copper, nickel
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6. All-Purpose Blue



All-Purpose Blue bar — versatile compound safe for nearly all metals

All-Purpose Blue is the most versatile compound in the lineup and an excellent choice when working with a variety of metals in a single session. Safe for use on virtually all materials, it delivers a clean, polished finish across different metal types without requiring a wheel change between very different substrates. Avoid use on plastics with a low melting point, as the heat generated by buffing wheels can cause surface damage.

- **Use:** Versatile finishing on nearly all materials
- **Best for:** All materials except low-melting-point plastics
- **Avoid on:** Plastics with low melting point

Quick Reference Table

Compound	Color	Grit Level	Best Materials	Avoid On
Black Emery	Black	Coarse	Aluminum, stainless steel, horn, wood	Plastics, gold
White Diamond	White	Medium-Coarse	Aluminum, gold, silver, brass, copper	—
Brown Tripoli	Brown	Medium	Aluminum, stainless steel, wood	—
Green Stainless	Green	Medium-Fine	Stainless steel, hard metals	Plastics, silver
Red Rouge	Red	Fine	Gold, silver, brass, copper, nickel	—
All-Purpose Blue	Blue	Versatile	All materials	Melting-point plastics

Recommended Polishing Workflow

Follow this sequence for best results. Moving through compounds in the correct order ensures each stage fully prepares the surface for the next, minimizing effort and protecting your workpiece.

1. **Start with Black Emery or Brown Tripoli** to remove deep scratches and prepare the raw surface. Choose Black Emery for the hardest metals requiring heavy cutting, or Brown Tripoli for a more moderate initial cut.
2. **Progress to White Diamond** to refine the surface, remove medium scratches left by the previous stage, and bring the metal to a smooth, even foundation ready for finishing.
3. **Use Green Stainless for hard metals** (e.g., stainless steel) **OR Red Rouge for soft metals** (e.g., gold, silver, brass, copper) to achieve a high luster and near-mirror finish.
4. **Finish with All-Purpose Blue** for a final clean polish if additional brilliance is desired or if you are working across multiple metal types in the same session.
5. **Always use a clean, dedicated buffing wheel** when switching compounds to prevent cross-contamination. Even microscopic traces of a coarser compound transferred to a finer stage can introduce scratches that are difficult to remove.