



For those who desire a parkerized finish that is truly black, Brownells offers a simple, easy-to-use, and inexpensive immersion process step that is incorporated into the Zinc Parkerizing system just prior to the actual parkerizing bath. Parkerized parts finished using the Brownells ZPDB offer the same corrosion resistance and other advantages as parts finished with only Brownells Zinc Parkerizing.

Brownells ZPDB was developed for use specifically with Brownells Zinc Parkerizing process. While we have experienced some success using ZPDB during the Brownells Manganese Parkerizing process, the results are not predictable and may not meet your expectations. Brownells recommends that the ZPDB be utilized only with Brownells Zinc Parkerizing.

**NECESSARY EQUIPMENT:**

- 1) You will need a tank large enough to be able to completely immerse the components to be finished.
- The requirements for the bath tank are that it be made of a non-reactive material. Acceptable materials include fiberglass, PVC, rubber-lined steel, and glass. Do not use stainless steel. Common plastic "paint" buckets, wastebaskets, and the like are good potential tanks.
- 2) Wire to suspend the components in the ZPDB bath. In most cases, the same suspension system that was established at the beginning of the Parkerizing process will be adequate for the ZPDB bath. Ordinary black-iron wire is recommended. Do not use copper or aluminum.
- 3) A non-reactive spoon or similar mixing device.
- 4) Suitable measuring devices made of glass or plastic.
- 5) Safety equipment.

Due to the acid content of the bath, it is recommended that efforts be made to protect hands, eyes, and skin. Protective gloves, face guard, and rubber apron should be worn when mixing or handling ZPDB, and also during the rest of the Parkerizing process.

**WARNING - PERSONAL PROTECTION REQUIRED**

As with any chemical solution, care should be taken when working with the Parkerizing solutions. **ALWAYS** wear proper protective clothing, including Heavy Rubber Gloves, Neoprene Rubber Apron and Full-Face Safety Shield. Avoid contact with the Parkerizing solution. Work only in a well ventilated area. In addition, have first aid materials consisting of a bottle of white vinegar, a bucket of clean, cool water and several paper or cloth towels on hand in case of an accident.

**WARNING: IRRITANT  
HARMFUL IF SWALLOWED OR INHALED**

Prevent contact with eyes and skin. Use with adequate ventilation. Do not swallow. **FIRST AID:** For eyes: Flush thoroughly with water for at least 15 minutes. Seek medical attention immediately. For skin: Wash with soap and water. Remove contaminated clothing. Seek medical attention if irritation develops. For inhalation: Move to fresh air. For ingestion: **DO NOT** induce vomiting. Consult physician or Poison Control Center **IMMEDIATELY**. Do not store in open or unlabeled container. Contains: Sodium Thiocyanate, Trisodium Nitritoltriace-tate.

**HOW TO USE**

Brownells ZPDB is offered as a concentrate, requiring only the addition of hydrochloric acid and water to make up the bath. To make up a gallon of Brownells ZPDB solution, the ingredients are 1 oz. ZPDB, 19 oz. HCL, and 108 oz. of clean water.

**To mix one gallon of solution:**

- 1) Carefully measure 108 oz. of clean, warm (80-100° F.) water and pour into the non-reactive tank.
- 2) Measure and add 19 oz. of hydrochloric acid to the water in the tank. Mix until solution is clear, using a non-reactive spoon or similar device. (Remember, always add acid to water, never the other way around.)
- 3) Measure and add 1 oz. of Brownells ZPDB to the tank. Mix thoroughly with non-reactive spoon.

The bath works well at "room temperature", but the ideal operating temperature is 80-110° F. The typical active Parkerizing/bluing room usually falls within that range during operation. Applying heat is not usually necessary unless the ambient temperature falls below 65° F. If possible, it is better to heat the room rather than the bath.

**BROWNELLS®  
ZINC  
PARKERIZING  
PRE-DIP  
BLACKENER**

#082-000-002



READ & FOLLOW THESE  
**INSTRUCTIONS**

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**To use Brownells ZPDB:**

The blackening step is performed during and within the normal process sequence of Zinc Parkerizing, with one exception. The hot water rinse (Step 4 in the Step-By-Step Operating Procedure) is eliminated, and the Brownells ZPDB immersion is substituted. It is performed immediately after the cold water rinse, (Step 3 in the Step-By-Step Operating Procedure), and just before the suspension in the Parkerizing solution (Step 5 in the Step-By-Step Operating Procedures).

The cleaned and rinsed parts, still suspended by wires, are immersed in the ZPDB bath for a very short period of time, typically no more than 5-15 seconds. The reaction that takes place is very definite and obvious, and nothing is gained in leaving the parts in the solution any longer than it takes. In fact, the components do not have to be totally black, just dark gray. Leaving the parts immersed beyond the black stage may result in a coating so thick that it cannot support itself, causing it to slough off. When the components have darkened, lift them out of the bath by their wires, and hold for a short period of time above the bath, allowing the excess solution to drain back. Do not handle the parts, as it will disturb the fragile coating, causing irregularities in the final finish. Move then to the parkerizing bath and continue the process. Used with the Brownells Zinc Parkerizing process, the finished surface will be dead black, but will retain the large crystal "sparkle" common to the Zinc Parkerized finish.

Storage of the bath requires the container to be well sealed. Either pour off the bath into plastic jugs with sealable caps, or into a plastic bucket with a sealable lid. If your available container cannot be sealed, at a minimum, stretch a clinging plastic wrap product over the top to seal out dirt and other contamination, and also to prevent the evaporation of the bath. Stir thoroughly before using again.

Reassemble the firearm according to the manufacturer's instructions. Check for proper functioning using **ACTION PROVING DUMMIES**. Make sure **ALL SAFETY MECHANISMS** are fully functional as designed and approved by the manufacturer. If these tests prove satisfactory, test-fire the firearm with live ammunition in a **SAFE** and **APPROPRIATE** manner. **IMPORTANT!** Start the live ammunition tests by first loading an **ACTION PROVING DUMMY**, then a live round, into the magazine. Only after several tests have been conducted in this manner should additional rounds be placed in the magazine and fired.

BROWNELLS GUNSMITHS DATA RING BINDER

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