

# Black-Magic<sup>®</sup> Brass Activator

Black-Magic Brass Activator is a pretreatment solution to be used in conjunction with Black-Magic CBL to achieve the ultimate black finish. It is used at a concentration of 16% by volume as a pre-dip before immersion in Black Magic CB Liquid to ensure the formation of a black oxide conversion finish on high zinc alloyed copper surfaces (15% to 35% zinc).

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## Features & Benefits

Liquid concentrate	Easier bath make-ups
Meets military spec: MIL F 495	Can be used in military applications
ROHS and REACH compliant	Reduction of hazardous chemicals

## Typical Applications

- Door and Cabinet Hardware
- Black Body heat absorption
- Optics, non-reflective
- Architectural and Garden Elements
- Metal Decorative Accessories
- Plumbing: Sinks and Faucets
- Medallions and Plaques
- Apparel: Buttons and Buckles

## Operating Conditions

### Finishing procedure

Pieces to be blackened may be processed in baskets, tumbling barrels, hung on racks or hooks, depending upon the shape, the weight, and production requirements.

1. Thoroughly clean with the alkaline cleaner recommended by your Hubbard-Hall representative. Typical cleaning time is 5 to 10 minutes.



2. Rinse in bottom-fed, overflowing cold water rinse.
3. Immerse in a 25% to 50% by volume muriatic acid solution or in an 8 oz. to 2 lbs. per gallon solution of Hubbard-Hall's Acid Salt W at room temperature for 30 seconds to 2 minutes to remove surface oxidation.
4. Rinse in bottom-fed, overflowing cold water rinse.
5. Immerse in Black-Magic Brass Activator solution, heated to 185°F, for 5 to 10 minutes.
6. Immerse in Black-Magic CBL solution (200°F to 210°F.) until a uniform, deep black color is developed. Immersion time will usually be from 5 to 10 minutes for copper and copper-plated surfaces, and up to 20 minutes for high zinc alloyed copper surfaces.
7. Rinse in bottom-fed, overflowing cold water rinse.
8. Immerse in a Metal Guard rust preventive oil as recommended by your Hubbard-Hall representative.

#### Operating tips

Problems will rarely arise with a properly maintained and controlled Black-Magic solution. Most problems can be traced to insufficient surface preparation of the work or an incorrect operating temperature. Other tips would include:

1. A glass thermometer should be kept on hand to accurately check the temperature of the bath.
2. Frequent small additions of concentrate will produce more uniform results than large amounts added less frequently. This is also true for water replenishment to compensate for evaporation loss. The strength of the solution and the amount of replenishment salts to be added can be determined by titrating with sodium thiosulfate as outlined in Chemical Control for Black-Magic CBL.
3. Ideally, the temperature of the solution should not drop below the recommended operating range of 200°F to 210°F. when work is introduced. Enough heat should be maintained to ensure that the solution does not drop below this temperature range for more than a few minutes, even with the heaviest loads. Maximum loads should not exceed one pound of work per one-half gallon of solution. Optimum loads would be approximately one pound of work to one gallon of solution, including the weight of barrels, baskets, and racks.
4. A thorough final rinse after blackening will minimize contamination of the sealant solutions



**Cleaning**  
the Hard to Clean



**Finishing**  
the Hard to Finish



**Treating**  
the Hard to Treat

## Caution

THIS MATERIAL CONTAINS CAUSTIC SODA. CAUSES SEVERE BURNS.

This material contains sodium chlorite, a strong oxidizer. Avoid contact with organic materials.

Do not get in eyes, skin or on clothing. Avoid breathing dusts or mists. Do not take internally. When handling, wear goggles and face shield.

While making solutions, add concentrate slowly to surface of solution to avoid violent reaction and spattering.

In case of contact, immediately flush skin or eyes with plenty of water for at least 15 minutes. For eyes, call a physician. Do not mix this product with any other material. Avoid contact with acidic materials and solutions.

Read and understand OSHA Safety Data Sheet prior to handling or working with this product.

WARRANTY: THE QUALITY OF THIS PRODUCT IS GUARANTEED ON SHIPMENT FROM OUR PLANT. IF THE USE RECOMMENDATIONS ARE FOLLOWED, DESIRED RESULTS WILL BE OBTAINED. SINCE THE USE OF OUR PRODUCTS IS BEYOND OUR CONTROL, NO GUARANTEE EXPRESSED OR IMPLIED IS MADE AS TO THE EFFECTS OF SUCH USE, OR THE RESULTS TO BE OBTAINED.

## Our people. Your problem solvers.

For more information on this process please call us at

1-800-648-3412

or [techservice@hubbardhall.com](mailto:techservice@hubbardhall.com)

