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BLACK F- 1401

Black for Ferrous Metals

DESCRIPTION:

Black- F1401 is a concentrate, rapid acting chemical solution to develop a black antique finish on steel & ferrous metal surfaces at **room temperature**. The product is a mildly acidic solution containing no Chromates, Sulfides, Cyanides, Caustics or Phenols.

INSTRUCTIONS:

1. Clean the part with Ajax, Comet or Triple-S' **Cleaner 104** with a Scotch Brite and medium scrubbing.
2. Rinse thoroughly with water and dry.
3. Apply **Black F-1401** solution with a brush, spray, rag or by dipping until the desired color develops.
4. Rinse thoroughly with over flowing water to stop chemical reaction & dry.
5. Neutralize with Triple-S Neutralizing solution or baking soda & water mixture.
6. Rinse thoroughly with water & Dry.
7. Seal the piece to protect the finish & provide maximum life. Triple-S offers several different options of sealers from which to choose, please inquire

PREPARATION:

For effective results, parts **must be** free of oil, grease, rust, alkalinity, acid, waxes or sealers when **Black- F1401** is applied. Parts must be thoroughly cleaned and de-oxidized prior to blackening. **Cleaner 104** is recommended for removing heavy oils and oxidation. Do not use petroleum degreasing solvents, that leave a residue on the surface. Rinse thoroughly with over flowing cold water to remove residual cleaners and dust. It is important that alkaline cleaners are completely rinsed off prior to blackening.

IMPORTANT: Triple- S does NOT recommend using any sort of alcohol, solvents like acetone, acids, mineral spirits or degreasers to clean parts prior to solution application. If the piece has heavy oxidation, **Cleaner 104** is a great cleaner to ready parts for **Black F-1401**. If the piece is fairly new & clean, powdered detergents like Ajax or Comet also work really well and are recommended. Use cleaning agent with a scotch brite pad or steel wool and medium scrubbing to prepare the part and then thoroughly rinse with fresh water. **Cleaner 104** run off should be contained and disposed of as per hazmat disposal laws.

Use an acid resistant container as the immersion tank. Plastic, plastic lined, glass, or rubber lined are also suitable. **Do not** use an unlined metal container. ***Black F-1401 should be diluted with 1 part F-1401 to 5 parts water.*** A uniform black finish will develop in a period of 10 to 60 seconds. Diluting the solution further will yield the same end result, it will simply take longer. The immersion time can be shortened or lengthened depending on the dilution rate of the solution.

APPLICATION:

Clean the surface with **Cleaner 104** & rinse thoroughly with cold water. Apply **Black- F1401** solution with a brush, dip or spray 5-10 seconds & let it react. The desired finish will develop within seconds. Once the desired color has developed, rinse thoroughly with over flowing cold water to stop the chemical reaction & then neutralize. Dry the piece immediately; leaving water on the piece can cause rusting. It is recommended that a durable metal sealer be applied to the coating to provide maximum life. Triple-S offers several different options of sealers from which to choose.

NEUTRALIZATION:

In order to ensure that the effects of **Black- F1401** have been fully halted prior to sealing, you must neutralize the surface. To neutralize, we recommend using water mixed with a small amount of Sodium Bicarbonate (Baking Soda): ½ cup per 1 gallon of water, fully dissolved or alternatively 1 cup of Ammonia per gallon of water. This alkaline rinse solution helps to fully neutralize the acidity of the **Black- F1401** solution, which is essential to prevent future oxidation. Rinse this solution off thoroughly & dry before sealing.

The information stated herein is based on information and tests we believe to be reliable. The accuracy or completeness thereof is not guaranteed. Since conditions of use are outside our control, user shall, before using, determine the suitability of the product for his intended use and user assumes all risk and liability in connection therewith.

SOLUTION CONTROL:

The blackening process with **Black- F1401** is a chemical reaction between the solution and metal surface. Chemical activity is gradually diminished as the solution is used but may be restored to the desired strength by adding fresh concentrate. Keep a record of additions to establish a bath history. For effective results, parts **must be** free of oil grease, rust, alkalinity, acid, waxes or sealers.

CAUTION:

Avoid contact with skin or eyes. Contact with skin or eyes may cause irritation and/or burning sensation. Protective clothing, rubber gloves and a face shield should be worn when handling. In case of skin contact, wash skin with large amounts of fresh water. In case of eye contact flush immediately with large amount of fresh water for at least 15 minutes and ***Call a Physician Immediately!*** **Refer to SDS for more information.**

DISPOSAL:

Contaminated product, soil, water container residues and spill clean-up materials may be hazardous wastes. Avoid contact water. Comply with local, state and federal regulations concerning solid or hazardous waste disposal and or container disposal.

BLACK F-1401 IS HAZARDOUS -- DO NOT TAKE INTERNALLY!!

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