

Product Bulletin

Product Name: Mi-Phos Black Solution & Concentrate
Product Code: 2202005

Revision Date: December 21, 2023

Mi-Phos™ Black Solution & Concentrate

Black Pre-dip for zinc phosphate to give black phosphate color.

Features & Benefits

ROHS and REACH	Product good for use in Europe
compliant	
Aids in producing a black,	Greater corrosion protection
fine-crystalline surface	than black oxide

Operating Conditions

Mi-Phos Black pre-dip chemical range

Concentration	6% by volume
Operating range	5% – 15%
Temperature	65°F – 85°F
Immersion time	10 sec – 1 min
	We recommend a 9% solution
	of Mi-phos black pre-dip

Corrosion resistance qualities are the same as obtained from standard type of zinc phosphate surfaces and are from good to excellent – depending upon the final rust preventive dip used on the phosphate surfaces.

The Mi-Phos Black is furnished as Mi-Phos Black Solution and Mi-Phos Black Concentrate.

The Mi-Phos Black Solution is used to make the initial 6% by volume of the Mi-Phos Black Pre-Dip. The Mi-Phos Black Concentrate is used for maintaining the chemical range of the Mi-Phos Black Pre-Dip.

Mi-phos black pre-dip make-up

The Mi-Phos Black Pre-dip is made up by mixing 6% by volume of the Mi-Phos Black Solution with 94% by volume of water:



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<u>Example</u>

To make up a 6%, 100-gallon solution of Mi-Phos Black Pre-Dip, use 6 gallons of Mi-Phos Solution and 94 gallons of water. Add the Mi-Phos Black Solution slowly into the water.

Note: Control bulletin available for chemically testing and maintaining the Mi-Phos Pre-Dip Solution

Processing procedure

- 1. Clean parts with the appropriate Hubbard-Hall cleaner.
- 2. Water rinse
- 3. Mi-Phos Black Pre-Dip
- 4. Water rinse
- 5. Immerse in the appropriate Mi-Phos Zinc Phosphate
- 6. Water rinse
- 7. Chromic acid sealer Mi-Phos SEALER C or CP
- 8. Final Metal Guard Rust preventive dip.

<u>Note:</u> If the parts are rusty or oxidized, an acid pickle followed by good rinsing should be incorporated between Steps 2 and 3.

The parts can be processed in baskets, racks or barrels – depending upon the type of parts to be processed and volume of production. The process is also adaptable to semi or fully automatic operation.

Equipment required

The tank for the Mi-Phos Black Pre-Dip solution can fiberglass, rubber, PVC, polyethylene or koroseal lined plain steel tanks. The following rinse tanks can be made of mild steel or plastic lined.

Tanks for the Mi-Phos Zinc phosphate solutions should be stainless steel. Acid pickling tanks should be rubber, PVC, polyethylene or koroseal lined tanks. Rinse tanks and alkali-cleaning tanks should be fabricated form mild steel.

Important

- Mi-Phos Black Pre-Dip Solution should be used in conjunction with Mi-Phos Z
 phosphating solutions as they are chemically designed to be compatible and will
 produce an excellent trouble-free operation.
- 2. Hubbard-Hall soak cleaners and rust preventive final dips are formulated specifically for this processing procedure.



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3. Chemical control procedures are available to maintain complete control and consistent results.

Waste Disposal

The Aquapure team will be able to assist with the proper disposal method.

Caution

WARNING...CONTAINS HYDROCHLORIC ACID...CAUSES BURNS.

Poison

Avoid breathing vapor. Avoid contact with skin and eyes. In case of contact, immediately flush skin and eyes with plenty of water for at least 15 minutes, for eyes, get medical attention. May be fatal if swallowed.

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For more information on this process, please call us at 203.756.5521 or email: techservice@hubbardhall.com

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