

# TECHNICAL DATA SHEET

ROSSING, NEW YORK

(Steri-tized)  
FOUR HALFS OF HEALTH

ACCEPTED  
MAY 1 1961  
UNDER THE FEDERAL INSECTICIDE  
FUNGICIDE AND ROENTICIDE ACT  
ECONOMIC POISON REGISTERED  
DISTRIBUTION NO. 1000

**911**

by  
**GRIFFIN**  
**CHEMICAL CORPORATION**  
115 N. WATER STREET; PEEKSKILL, N. Y.

FOR MANUFACTURING USE ONLY

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MAY 1 1961  
UNDER THE FEDERAL INSECTICIDE  
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**ACTIVE INGREDIENTS:** 95.0% Phenyl mercuric acetate  
**INERT INGREDIENTS:** 5.0%

**CAUTION:** This product is toxic and must be handled carefully. Contact of concentrate with skin even for short periods may result in skin irritations. Wash hands promptly with cold water directly after handling. In the event of burning or blistering, treat the afflicted parts, after washing, with a strong brew of tea. Do not use oils or greases. In all severe cases call doctor at once. Keep concentrate away from foods, humans, pets and livestock.

**POISON**

**WARNING:** This is a fatal if swallowed. May cause delayed  
toxicity. Do not breathe dust or fumes. If you  
get this chemical on your skin, wash with water.  
If you get this chemical in your eyes, wash with water for at  
least 15 minutes. If you get this chemical in your mouth,  
do not swallow. Spit it out and wash your mouth with water.

**ANTIDOTE:** If you get this chemical on your skin, wash with water.  
If you get this chemical in your eyes, wash with water for at  
least 15 minutes. If you get this chemical in your mouth,  
do not swallow. Spit it out and wash your mouth with water.

The fitness of this chemical is not warranted by the producer for any particular use, even though such use is known, and Buyer assumes all responsibility, including injury or damage, resulting from its use as such, or in combination with other materials.

PURATIZED PMA is a free-flowing agent which contains an industrial grade of high purity. It is offered to the trade as a free-flowing powder, packaged in non-sifting one-pound containers. It is added to the system at the beater or fan, depending on the nature of the special grade of paper used in the process. However, the hazards of handling this chemical are to be avoided.

1. **Beater application:** The coating is to be applied to paper, use the minimum amount of moisture-free fiber. Mix with water and agitate for 10 minutes, if solid material, or 20 minutes if dry powdered material is used.
2. **Coating application:** For coated paper, use 0.1 lb. per side per ton of paper. For highly sized sheets and board-making, use 0.1 lb. per side per ton is sufficient. For absorbent sheets, use upper ranges. In the case of phenyl mercuric acetate if temperature is above 65°C. (150°F.) during processing, use 0.1 lb. per side per ton. When only one side of the sheet is coated, the other side is treated in calendar water or a similar solution.
3. **Calendar application:** For the same concentrations as in coating application, coated medium and liner board are generally more effective than coated paper board, and the maximum concentrations of toxicant should be used. If this is unknown, use a solution of 0.1 lb. per side per ton.

Phenyl mercuric acetate is used in the coating of paper.

**CAUTION** — If people are in contact with this chemical, wash promptly. When sizing is used in the process and alginates are added to the system, the hazards in laboratory for comparison.

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*Handwritten notes and signatures at the bottom of the page.*



# TECHNICAL DATA SHEET

### PHYSICAL CONSTANTS

Active ingredients:

Phenyl mercuric acetate. . . . .	95%
Inert ingredients. . . . .	5%
Metal content. . . . .	59.6%
Molecular weight of active ingredient. . . . .	336.7
Solubility in cold water. . . . .	1:600
Melting point. . . . .	119°C *Average
Color. . . . .	White
Volatility. . . . .	Non-volatile
Fire hazard. . . . .	None
Physical state. . . . .	Solid
Stability in storage. . . . .	Excellent
Stability to light. . . . .	Very good

\* Industrial grade exhibits wide range of melting point. However, this characteristic does not reduce its biostatic properties.

### BACTERIOSTATIC VALUES

Bacillus subtilis. . . . .	1: 2,000,000
Alkaligenes viscosus. . . . .	1: 1,300,000
Flavobacterium aquatile. . . . .	1:13,300,000
Achromobacter globiforme. . . . .	1:20,000,000
Pseudomonas aeruginosa. . . . .	1: 300,000
Aerobacter aerogenes. . . . .	1: 800,000
Aerobacter cloacae. . . . .	1: 1,330,000
Proteus vulgaris. . . . .	1: 2,000,000
Escherichia coli. . . . .	1: 1,000,000
Staphylococcus aureus. . . . .	1: 1,330,000
Bacillus megatherium. . . . .	1:13,000,000

### FUNGISTATIC VALUES

Aspergillus niger. . . . .	1:550,000
Penicillium notatum. . . . .	1:500,000
Monilia sitophila. . . . .	1:200,000
Cladosporum sp. . . . .	1:300,000
Oospora lactis. . . . .	1:500,000
Penicillium digitatum. . . . .	1:300,000
Torula utilis. . . . .	1:800,000
Endomyces magnusii. . . . .	1:440,000

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### DESCRIPTION

Phenyl Mercuric Acetate is a white material, in granular or free-flowing powder form. This product is the basic material from which all other phenyl mercuric compounds are derived.

Phenyl mercuric compounds are among the most powerful and efficient ~~antiseptics~~, ~~fungicides~~ and ~~bactericides~~. They exhibit a powerful inhibitory effect on the growth of lower forms of life. Because of this, extremely low concentrations will arrest, control and inhibit microorganisms.

Solubility of phenyl mercuric acetate as such is quite low in water, petroleum solvents and fatty oils. However, the soaps of acids such as oleic, stearic, linoleic, etc. are quite soluble in petroleum solvents and fatty oils.

### SPECIFICATIONS

#### ACTIVE INGREDIENTS:

Phenyl Mercuric Acetate--Crude	95% Av.
Technical	99% Av.
Purified	99% Av.
Inert Materials --Crude	1% Av.
Technical	1% Av.
Purified	2% Av.
Metallic Content-mercury	59.6%
Molecular Wt. Active Ingredient	336.7
Solubility in Cold Water	1:600
Melting Point	119°C Av.
Color	White
Physical State	Solid, Powder, Granular
Volatility	Non-Volatile
Fire Hazard	None
Stability-Storage	Excellent
Stability-Light	Very Good

ACCEPTED