



PRODUCT INFORMATION

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EMERGENCY - MARTRON 704-289-1934
CHEMTREC 800-424-9300

REF # - MFC-000506

MARTRON HWE Heavy-duty Alkaline Metal Cleaner

In the metal working industry, **Martron HWE** is used for cleaning steel, copper-plated steel, brass and bronze prior to electroplating and for cleaning in continuous strip mills. It may be used as electro cleaner.

SECTION 1: CHARACTERISTICS

Behavior in hard water.....	Sequesters
Effect of freezing.....	None
Effect of aging.....	None
Effect of long high temperature storage.....	None
Effect of prolonged boiling.....	Breakdown of polyphosphates
Hydroscopic tendency.....	Slight
pH at working concentrations.....	12.5 to 13.2 at 70°F
Effect on metals.....	If used as recommended, will not affect copper, steel, stainless steel, magnesium, negligible effect on brass; attacks zinc, tin & aluminum.
Foaming tendency.....	Slight
Maximum solubility.....	16 oz./gal. at 79°F
Normal working concentration.....	6 to 14 oz./gal.
Normal operating temperature range.....	120° to 180°F
Rinsability.....	Good with hot or cold water, even when dried on

SECTION 2: APPLICATION PROCEDURE

As a versatile cleaner prior to plating, **Martron HWE** is used at concentrations from 6 to 14 ounces/gallon in a still soak tank for pre-cleaning, or as an electro cleaner in tank or barrel operations. It is primarily for shops plating a variety of metals (steel, copper-plated steel, brass, bronze) but none in sufficient volume to warrant a specialized electro cleaner for a specific metal.

Martron HWE is used at a concentration from 2 to 4 ounces/gallon for cleaning in continuous strip mills.

SECTION 3: EQUIPMENT

Martron HWE may be used with carbon steel equipment.

SECTION 4: MIXING AND SOLUTION CONTROL PROCEDURE

Sprinkle on surface of full volume of warm water, agitate to dissolve, and bring to operating temperatures. Do not add upkeep to boiling solutions.

SECTION 5: TITRATION PROCEDURE

1. Remove 1 ml sample from operating bath.
2. Add water (no more than 25 ml).
3. Add 3-5 drops Phenolphthalein Indicator.
4. Titrate with 1.0N Sulfuric Acid.
5. Calculate Number OF DROPS x 0.400 which equals ounces per gallon.

SECTION 6: SAFETY NOTES

Martron HWE should not be used until a Safety Data Sheet (SDS) has been received and reviewed by supervisory as well as operating personnel. In as much as it is an alkaline material, **Martron HWE** should not be added to hot Mix by sprinkling over the surface and agitate until dissolved. Safety equipment such as gloves, aprons and face masks are recommended while working with this product. **Martron HWE** should not come into contact with skin.

SECTION 7: DISPOSAL

Generally, neutralization before disposal is required. However, consult Federal, State and Local regulations to be sure that your disposal method is in conformance.

SECTION 8: STORAGE

Store in clean dry area, avoid contact with organic materials and concentrated acids. Keep container closed when not in use and dispose of containers when empty.