



INDUSTRIAL COATINGS

(STCL247)

# STAGE CLEANER 247

## PRETREATMENT TECHNICAL DATA SHEET

### CHEMICAL CLEANING FOR PART WASHERS & PHOSPHATE SYSTEMS

#### PRODUCT DESCRIPTION

**STAGE CLEANER 247** is an alkaline material having excellent sequestering properties that will dissolve many types of soil and rust.

#### TECHNICAL PROPERTIES

Composition:	Liquid
Appearance:	Clear
Recommended Concentrations:	10-15% by volume
Recommended Temperatures:	180 <sup>0</sup> F

#### PRODUCT ADVANTAGES

- Designed for removing scales resulting from insoluble soaps, calcium hardness from risers, coils, and nozzles of the spray washer.
- Will also remove built up grease and oils from washer walls, tank, and risers.
- Eliminates the safety hazard to operating personnel so frequently encountered with powdered caustic cleaners and reduces man-hours required for charging and cleaning spray or immersion washer stages

FEB12/REV6

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### USE & CONTROL INSTRUCTIONS:

#### PROCESS SEQUENCE

The following is meant as a guideline for the effective use of this product in the cleaning of process equipment. It is important that a plant/equipment specific plan be developed. It is also important that all departments associated with the cleaning and waste treatment of the spent solution be involved in the assemblage of the plan.

- Drain and flush tank. Remove all sludge from containment pits or sumps.
- Remove all end caps or open all ball valves on stage risers. If stage walls are excessively dirty, rotate several side nozzles toward the walls to allow solution contact. If this is not possible, clean in the normal riser position.
- Fill tank 3/4 full with fresh water and heat to 180°F or as hot as possible. If no heat is available, the concentration of **STAGE CLEANER 247** may have to be increased to accomplish thorough cleaning.

If a National Liquid Blaster (NLB) system is present, you will have to by-pass the high-pressure pumps and circulate through the bag filter supply pumps. All bag filters should be removed from the canisters. If a multi-riser system is present, remove bag filters from canisters and operate system as normal.

- With circulating pumps on, charge the tank with 10-15% by volume of **STAGE CLEANER 247**. (This concentration will vary depending upon the availability of heat and the amount and type of soil to be removed.

\*NOTE: With lower temperatures, foaming may occur. FOAM DEPRESSOR 308CK is recommended to control a foaming condition.

- Circulate for two hours with ball valves and/or end caps open. Shut washer down and close all ball valves and/or end caps. Caution should be exercised to avoid skin contact with overhead drips. Evaluate cleanliness of washer. Start circulating pumps and continue for 4-8 hours evaluating washer cleanliness until washer condition is satisfactory.
- Drain, flush, and fill with fresh water. Hose down all vestibules and enclosures. Dump to drain and hose out tank (waste treatment or Plant facilities may make it prohibitive to dump to drain; consult with Plant Personnel as to what the proper disposal/treatment should be).
- Refill with water and circulate. The fill, circulate and drop procedure should continue until the pH of the tank solution matches that of city water.

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- When the pH of the tank solution matches that of city water, recharge the tank with production material.

### Tank Neutralization Notes:

It is not advised to neutralize **STAGE CLEANER 247** in the process tank. This practice can cause some of the solubilized grease and oil to precipitate from solution and form a layer that will float on top of the solution. When this happens, the grease and oil will redeposit on the walls of the freshly cleaned tank and resoil the process tank and piping.

It is advised in the case of **Part Washer Boil Outs** (when free metal fines contain Zn or Al are present), that the bath containing **STAGE CLEANER 247** be neutralized to a pH of 6-9 before sending the solution to waste treatment. This is done in an effort to eliminate the production of hydrogen gas evolution in the sump pits and transfer lines. If this is completed in the Part Washer tanks, then they must be thoroughly rinsed of any remaining residue on the walls or floor of the process tanks – preferably with heated water.

### **NOTE: \* NEUTRALIZATION PROCESS FOR STAGE CLEANER 247**

In some plants, the alkaline solution must be neutralized in the stage tank prior to discharging to waste treatment.

In order to determine the alkaline content remaining, a titration of the **STAGE CLEANER 247** solution should be performed in accordance with the procedure below.

This neutralization procedure results in a pH of approximately 8.2.

Free Alkalinity	Bath Concentration	Amt of Conc. Hydrochloric Acid (Scale Remover 9F or Corrosol 1761) required to treat 1000 gallons of solution
6.8 mls	5%	1000# (110 gallons)
13.5 mls	10%	2000# (220 gallons)
20.3 mls	15%	3500# (330 gallons)
27.0 mls	20%	4000# (440 gallons)

### **TITRATION PROCEDURES**

Transfer a 10 ml sample of the **STAGE CLEANER 247** operating bath into a 150 ml beaker.

Add 4-5 drops of INDICATOR #5 (Phenolphthalein) and titrate with TEST SOLUTION #1 (1N H<sub>2</sub>SO<sub>4</sub>) until the solution changes from pink to colorless.

The mls of TEST SOLUTION #1 is recorded as Free Alkalinity.

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### TECHNICAL DATA SHEET DISCLAIMER—INDUSTRIAL COATINGS:

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