

## DOCUMENT MANAGEMENT SYSTEM

Page 1 of 2

Doc# UT04-10-SJP  
Title: CHROME TREATMENT USING SODIUM BISULFITE  
Issue Dt: 04/09/2015  
Revision Dt: 08/02/2018 Review Interval: 24  
Cat: Safety Doc Type: SJP  
Auth:  
Desc: CHROME TREATMENT USING SODIUM BISULFITE  
Loc: Midwest - Plant Maintenance Service-Midwest - Plant Maintenance-Midwest-Gary Works

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## 1.0 PURPOSE

### CHROME TREATMENT USING SODIUM BISULFITE

## 2.0 HAZARDS

WARNING TO PREVENT INJURIES

CHEMICAL EXPOSURE, FUMES FROM CHEMICALS ARE AN IRRITANT AND CAN CAUSE SHORTNESS OF BREATH.  
EXPOSURE OF EYES AND SKIN TO CHEMICAL.

FUMES CAN CAUSE SHORT TERM RESPIRATORY DISTRESS MOVING MACHINERY, TRIPPING, SLIPPING  
HAZARDS, CHEMICAL EXPOSURE, ELECTRICAL EQUIPMENT, PINCH POINTS, EXPOSURE OF EYES AND SKIN TO  
CHEMICAL.

MOVING MACHINERY, TRIPPING, SLIPPING HAZARDS, CHEMICAL EXPOSURE, BACK STRAIN, PINCH POINTS,  
ELECTRICAL EQUIPMENT, EXPOSURE OF EYES AND SKIN TO CHEMICAL.

## 3.0 PERSONAL PROTECTIVE EQUIPMENT

HARD HAT

SAFETY SHOES

SAFETY GLASSES

LONG SLEEVE SHIRT

HEARING PROTECTION

GLOVES

RUBBER GLOVES

ADD THE FOLLOWING ITEMS IF FUMES ARE PRESENT:

CHEMICAL SPLASH SUIT

CHEMICAL GOGGLES

ORGANIC VAPOR

CHEMICAL RESPIRATOR

FACE SHIELD

RUBBER BOOTS

SAFETY PERSON

## 4.0 TOOLS AND EQUIPMENT

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## 5.0 PRECAUTIONS AND LIMITATIONS

## 6.0 PRE-REQUISITE ACTIONS, PERMITS, OR FORMS

## 7.0 WORK PROCEDURE

PROCESS OVERVIEW	THE HEXAVALENT CHROME IS BEING CHANGED TO TRIVALENT CHROME USING SODIUM BISULFITE.
SDS	AN SDS IS AVAILABLE FOR THE CHEMICAL. THE CHEMICAL HAS A VERY NOTICEABLE ODOR THAT SEEMS TO TAKE YOUR BREATH AWAY. BUT IT IS NOT LIFE THREATENING. IT HAS A NFPA LISTING OF "1" FOR HELATH WHICH MEANS THAT ITS POTENTIAL TO HARM YOU IS LOW. SO A SMALL LEAK IS VERY NOTICEABLE. NOTE IT IS POSSIBLE FOR THE CHEMICAL TO RELEASE SULFUR DIOXIDE FUMES, IF FUMES ARE A PROBLEM, USE AN ORGANIC VAPOR CHEMICAL RESPIRATOR.
INSPECTION	ENTER THE SODIUM BISULFITE STORAGE ROOM OF THE CHROME TREATMENT BUILDING WITH CARE. IF A STRONG ODOR OF THE CHEMICAL IS APPARENT, STOP, VERIFY VENTILATION FAN IS ON, GET A RESPIRATOR, CHEMICAL SPLASH SUIT, AND CHEMICAL GOGGLES; ALSO GET SOMEONE TO HELP YOU. HAVE THEM STAY OUTSIDE WHEN YOU GO INSIDE. INSPECT THE EQUIPMENT FOR LEAKS, THEN OPERATE THE EQUIPMENT AS NEEDED TO FEED CHEMICAL. IF YOU CAN SMELL THE CHEMICAL THRU THE RESPIRATOR, DO NOT ENTER THE STORAGE ROOM, NOR THE BLDG. CONTACT THE SHIFT MANAGER.
CHROME TREATMENT PLANT OPERATING AND SAMPLING	<p>IF CHEMICAL FUMES ARE STRONG AT THE CHROME TREATMENT PLANT, WEAR A RESPIRATOR, CHEMICAL SPLASH SUIT AND CHEMICAL GOGGLES. MONITOR THE PROCESS FROM THE COMPUTER TO ENSURE PROPER TREATMENT. IF NECESSARY, PUT THE TRAIN IN RECYCLE UNTIL THE TREATMENT IS BACK UNDER CONTROL.</p> <p>SECURE SAMPLES, PERFORM WORK AS NEEDED</p>