

SIFCO SELECTIVE PLATING DIVISION OF SIFCO INDUSTRIES, INC. -- SIFCO DALIC PLATING SOLUTION CADMIUM (ACID) -- 6850-01-349-8654

===== Product Identification =====

Product ID:SIFCO DALIC PLATING SOLUTION CADMIUM (ACID)

MSDS Date:03/13/2000

FSC:6850

NIIN:01-349-8654

MSDS Number: CJNWB

=== Responsible Party ===

Company Name:SIFCO SELECTIVE PLATING DIVISION OF SIFCO INDUSTRIES, INC.

Address:5708 SCHAAF

ROAD

City:CLEVELAND

State:OH

ZIP:44131-1394

Country:US

Info Phone Num:216-524-0099 /FAX: 216-524-6331

Emergency Phone Num:INTL: 703-527-3887(COLLECT)

Resp. Party Other MSDS Num.:SPS 5050

Chemtrec Ind/Phone:(800)424-9300

CAGE:11924

=== Contractor Identification ===

Company Name:SIFCO SELECTIVE PLATING DIV OF SIFCO INDUSTRIES INC.

Address:5708 SCHAAF ROAD

Box:City:CLEVELAND

State:OH

ZIP:44131-1394

Country:US

Phone:216-524-0099/ FAX: -6331

Contract Num:SP0450-00-M-D346

CAGE:11924

Company Name:SI

FCO SELECTIVE PLATING DIV OF SIFCO INDUSTRIES INC.

Address:5708 SCHAAF ROAD

Box:City:CLEVELAND

State:OH

ZIP:44131-1394

Country:US

Phone:216-524-0099/ FAX: -6331

Contract Num:SP0450-00-M-SC50

CAGE:11924

Company Name:SIFCO SELECTIVE PLATING DIV OF SIFCO INDUSTRIES INC.

Address:5708 SCHAAF ROAD

Box:City:CLEVELAND

State:OH

ZIP:44131-1394

Country:US

Phone:216-524-0099/ FAX: -6331

Contract Num:SP0450-00-M-SE33

CAGE:11924

Company Name:SIFCO SELECTIVE PLATING DIV OF SIFCO INDUSTRIES INC.

Address

:5708 SCHAAF ROAD

Box:City:CLEVELAND

State:OH

ZIP:44131-1394

Country:US

Phone:216-524-0099/ FAX: -6331

Contract Num:SP0450-01-M-ZD19

CAGE:11924

Company Name:SIFCO SELECTIVE PLATING DIV OF SIFCO INDUSTRIES INC.

Address:5708 SCHAAF ROAD

Box:City:CLEVELAND

State:OH

ZIP:44131-1394

Country:US

Phone:216-524-0099/ FAX: -6331

Contract Num:SP0450-99-M-ND16

CAGE:11924

=====  
Composition/Information on Ingredients  
=====

Ingred Name:SULFURIC ACID (SARA 302/313) (CERCLA)

CAS:7664-93-9

RTECS #:WS5600000

Minumum % Wt:5.

Maxumum % Wt:10.

Other REC Limits:NONE RECOMMENDED

OSHA PEL:1 MG/M3

ACGIH TLV:1 MG/M3/3 STEL; 9495

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ingred Name:CADMIUM SULFATE

CAS:10124-36-4

RTECS #:EV2700000

Minumum % Wt:20.

Maxumum % Wt:30.

Ingred Name:WATER

CAS:7732-18-5

RTECS #:ZC0110000

Minumum % Wt:60.

Maxumum % Wt:75.

=====  
Hazards Identification  
=====

LD50 LC50 Mixture:PRODUCT'S LD50 (ORAL RAT) WAS NOT STATED

Routes of Entr

y: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES  
Health Hazards Acute and Chronic:TARGET ORGANS: SKIN, EYES, NASAL  
CAVITY, LUNGS, KIDNEYS AND LIVER. CORROSIVE TO EYES AND MAY CAUSE  
SEVERE EYE DAMAGE. SKIN CONTACT: CORROSIVE TO SKIN, CAUSES BURNS  
AND POSSIBLE ALLERGIC REACTION. SUBSTANCE IS POSSIBLY TOXIC VIA  
SKIN ULCERATIONS. SUBSTANCE IS POSSIBLY TOXIC IF ABSORBED THROUGH  
THE SKIN. INHALATION: MAY CAUSE SNEEZING, NASAL DIS-

CHARGE,  
COUGHING, HEADACHES, DIZZINESS, NAUSEA, FATIGUE OR DIFFICULTY IN  
BREATHING. INGESTION: HARMFUL IF SWALLOWED. MAY CAUSE SEVERE AND  
PERMANENT DAMAGE TO MOUTH, THROAT, AND STOMACH.

Explanation of Carcinogenicity:CADMIUM SULFATE IS LISTED ON THE LIST  
FOR ALL 3 AGENCIES AS CARCINOGENIC TO HUMAN.

Effects of Overexposure:PROLONGED OR REPEATED EXPOSURE MAY CAUSE DAMAGE  
TO SKIN, EYES, RESPIRATORY SYSTEM AND TEETH. MAY CAUSE SEVERE AND  
DELAYED HEALTH EFFECTS SUCH AS INFLA-

MMATION OF THE LUNGS, CHEMICAL  
BRONCHITIS, AND/OR CANCER.

Medical Cond Aggravated by Exposure:PRE-EXISTING SKIN & EYE CONDITIONS;  
RESPIRATORY SYSTEM DISORDERS.

=====  
===== First Aid Measures =====

First Aid:EYES: HOLD EYELIDS APART AND FLUSH EYES WITH PLENTY OF WATER  
FOR AT LEAST 15 MINUTES. SKIN: IMMEDIATELY FLUSH SKIN WITH PLENTY  
OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED  
CLOTHING AND SHOES. THOROUGHLY DECONTAMINATE (OR

DISCARD) CLOTHING  
AND SHOES. INHALATION: REMOVE TO FRESH AIR. LAY VICTIM DOWN, LEGS  
RAISED. LOOSEN TIGHT CLOTHING, COVER WITH A BLANKET. IF NOT  
BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT,  
GIVE OXYGEN. INGESTION: DO NOT INDUCE VOMITING, UNLESS ADVISED BY  
EMS. GIVE VICTIM LARGE QUANTITIES OF WATER OR MILK WITH 1-2 FRESH  
EGGS. GIVE A GLASS OF 1/3 VINEGAR WITH 2/3 WATER.

=====  
===== Fire Fighting Measures =====

Flash Poi  
nt:NONE

Lower Limits:NONE  
Upper Limits:NONE

Extinguishing Media:ALL. MATERIAL WILL NOT BURN.

Fire Fighting Procedures:NIOSH/MSHA APPROVED POSITIVE-PRESSURE  
SELF-CONTAINED BREATHING APPARATUS. STRUCTURAL FIRE FIGHTERS'  
PROTECTIVE CLOTHING MAY NOT PROVIDE ADEQUATE PROTECTION.

Unusual Fire/Explosion Hazard:CONTACT WITH METALS MAY FORM FLAMMABLE  
HYDROGEN GAS. CONTAINERS CAN BUILD UP PRESSURE AND BURST IF EXPOSED  
TO HEAT (FIRE). WATER RUNOFF CAN CAUSE ENVIRONMENTAL DAMAGE. DIKE  
AR

EA FOR LATER DISPOSAL.

===== Accidental Release Measures =====

Spill Release Procedures:DO NOT TOUCH OR WALK THROUGH SPILLED MATERIAL. ISOLATE HAZARD AREA & KEEP PEOPLE AWAY. NOTIFY YOUR FACILITY EMERGENCY COORDINATOR. ELIMINATE ALL SOURCES OF IGNITION. PROVIDE MAXIMUM VENTILATION. DO NOT RELEASE INTO SOIL, SEWERS, OR NATURAL BODIES OF WATER. WEAR PROPER PERSONAL PROTECTIVE EQUIPMENT (PPE). CAREFULLY MOP UP OR VACCUM SPILL AND TRIPLE RINSE WITH WATER INTO PLASTIC CONTAINER.  
Neutralizing Agent:SODA ASH AND/OR CRUSHED LIMESTONE.

===== Handling and Storage =====

Handling and Storage Precautions:KEEP CONTAINER TIGHTLY CLOSED IN UPRIGHT POSITION. STORE AT 60-90F AWAY FROM INCOMPATIBLE MATERIALS & PHYSICAL HAZARDS. DO NOT REMOVE OR DEFACE CONTAINER LABELS. USE "BUDDY SYSTEM" WHEN WORKING WITH CHEMICALS. DO NOT GET INTO EYES, ON SKIN, ON CLOTHING. DO NOT BREATHE VAPOR, MIST OR GAS.

Other Precautions:USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING. TRIPLE RINSE CONTAINERS BEFORE DISCARDING PUT NOTHING ELSE IN THIS CONTAINER. NOTE FROM SPILL: RELEASE OF A REPORTABLE QUANTITY(RQ) REQUIRES NOTIFICATION OF PROPER AUTHORITIES.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:IF ENGINEERING CONTROLS ARE NOT FEASIBLE, THE RESPIRATORY PROTECTION PROGRAM MUST COMPLY WITH OSHA'S 29 CFR 1910.134, 30 CFR 11 AND ANSI Z88.2 REQUIREMENTS.

Ventilation:LOCAL EXHAUST VENTILATION REQUIRED TO MEET THE PERMISSIBLE EXPOSURE LIMITS (PEL) DURING THE USE OF THIS PRODUCT.

Protective Gloves:NITRILE, NEOPRENE, VINYL, LATEX GLOVES.

Eye Protection:FACE SHIELD & SAFETY GLASSES W/SIDE SHIELDS OR SPLASH-PROOF CHEMICAL GOGGLES.

Other Protective Equipment:IMPERVIOUS BOOTS, APRON, PROTECTIVE CLOTHING AS REQUIRED BY JOB CONDITIONS. EYE WASH STATION & SAFETY SHOWER. WASHING FACILITIES NEAR WORK AREA.

Work Hygiene

enic Practices:WASH HANDS AFTER HANDLING AND BEFORE EATING,  
DRINKING, OR SMOKING. LAUNDRER CONTAMINATED CLOTHES BEFORE REUSE.  
Supplemental Safety and Health  
DO NOT WEAR CONTACT LENSES. SIFCO PART NUMBER: SPS-5050.

===== Physical/Chemical Properties =====

HCC:C1

NRC/State Lic Num:NONE

Boiling Pt:>100.C, 212.F

Melt/Freeze Pt:4,455 LITERS, (RELEASE) REPORTABLE QUANTITY:

>28 LITERS. EXTREMELY HAZARDOUS SUBSTANCE: SULFURIC ACID.

Federal Regulatory Information:TS

CA: ALL INGREDIENTS OF THIS PRODUCT

ARE LISTED UNDER TSCA. ODS: THIS PRODUCT DOES NOT CONTAIN OZONE  
DEPLETING SUBSTANCE. THIS PRODUCT DOES NOT CONTAIN ANY  
POLYCHLORINATED BYPHENYLS. CERCLA AND EPCRA: THRESHOLD PLANNING  
QUANTITY: >4,455 LITERS, (RELEASE) REPORTABLE QUANTITY: >28 LITERS.

EXTREMELY HAZARDOUS SUBSTANCE: SULFURIC ACID. OSHA CADMIUM  
STANDARD (29 CFR 1910.1027): WARNING SIGNS SHALL BE DISPLAYED IN  
ALL REGULATED AREA & APPROACHES WITH THE FOLLOWING INFORMATION:

DANGER, CADMIUM, CANCER HAZARD, CAN CAUSE LUNG & KIDNEY DISEASE,  
AUTHORIZED PERSONNEL ONLY, RESPIRATORS REQUIRED IN THIS AREA.

State Regulatory Information:WARNING! THIS PRODUCT CONTAINS DETECTABLE  
AMOUNTS OF CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE  
CANCER, BIRTH DEFECTS, OR REPRODUCTIVE TOXICITY.

===== Other Information =====

Disclaimer (provided with this information by the compiling agencies):

This information is furnished for use by elements of the Department  
of Defense. The United States of America in no manner whatsoever,  
expressly or implied, warrants this information to be accurate and  
disclaims all liability for its use. Any person utilizing this  
document should seek competent professional advice to verify and  
assume responsibility for the suitability of this information to their  
particular situation.