

SIFCO SELECTIVE PLATING DIVISION OF SIFCO INDUSTRIES INC. -- 1024, SIFCO DALIC SOLUTION  
NO. 4 ETCHING AND ACTIVATING -- 6850-01-197-7786

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Product Identification  
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Product ID:1024, SIFCO DALIC SOLUTION NO. 4 ETCHING AND ACTIVATING

MSDS Date:03/06/2000

FSC:6850

NIIN:01-197-7786

Status Code:A

MSDS Number: CLGZZ

=== 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; -6331 FAX

Emergency Phone Num:800-424-9300

Resp. Party Other MSDS Num.:1024

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:SP0450-01-M-ZE51

CAGE:11924

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Composition/Information on Ingredients  
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Ingred Name:HYDROCHLORIC ACID

CAS:7647-01-0

RTECS #:MW4025000

Minumum % Wt:5.

Maxumum % Wt:10.

Other REC Limits:NIOSH, IDLH 50PPM

OSHA PEL:C, 7 MG/M3, 5 PPM

ACGIH TLV:C, 7.5 MG/M3, 5 PPM

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:5000 LBS

Ingred Name:WATER

CAS:7732-18-5

RTECS #:ZC0110000

Minumum % Wt:90.

Maxumum % Wt:95.

Other REC Limits:NONE RECOMMENDED

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Hazards Identification  
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: Inhalation:YES Skin:YES Ingestion:YES

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:EYES: CORROSIVE TO EYES AND MAY CAUSE SEVERE EYE DAMAGE. SKIN CONTACT: CAUSES IRRITATION. MAY CAUSE SKIN BURNS. INHALATION: MAY CAUSE SNEEZING, NASAL DISCHARGE, COUGHING, HEADACHES, DIZZINESS, NAUSEA, FATIGUE, OR DIFFICULTY IN BREATHING. INGESTION: MAY CAUSE SEVERE AND PERMANENT DAMAGE TO MOUTH, THROAT, AND STOMACH. CHRONIC EFFECTS: PROLONGED OR REP

EATED EXPOSURE MAY

CAUSE EROSION OF TEETH, BRONCHIAL IRRITATION, GASTROINTESTINAL DISTURBANCES. MAY CAUSE SEVERE AND DELAYED HEALTH EFFECTS SUCH AS INFLAMMATION OF THE LUNGS AND CHEMICAL BRONCHITIS. TARGET ORGANS: SKIN, EYES, RESPIRATORY SYSTEM.

Explanation of Carcinogenicity:ACGIH: NO.

Medical Cond Aggravated by Exposure:PREEXISTING SKIN AND EYE CONDITIONS, RESPIRATORY SYSTEM DISORDERS.

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

First Aid:EYES: H

OLD LIDS APART AND FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. SKIN: IMMEDIATELY FLUSH WITH WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. DECONTAMINATE (OR DISCARD) CLOTHING AND SHOES. INHALATION: REMOVE TO FRESH AIR. LAY VICTIM DOWN, LEGS RAISED. LOOSEN TIGHT CLOTHING, COVER WITH BLANKET. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GIVE OXYGEN IF BREATHING DIFFICULT. INGESTION: DO NOT INDUCE VOMITING, UNLESS ADVISED BY EMS. GIVE LARGE QUANTITIES OF WATER OR MILK. GIVE MILK OF MAGNESIA OR FRESH EGGS. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

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

Flash Point:NONE

Lower Limits:NONE

Upper Limits:NONE

Extinguishing Media:ALL.

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

Unusual Fire/Exp

losion 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 AREA FOR LATER DISPOSAL.

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

Spill Release Procedures:DO NOT TOUCH OR WALK THROUGH SPILL. ISOLATE AREA. NOTIFY EMERGENCY COORDINATOR. ELIMINATE IGNITION SOURCES. PROVIDE MAXIMUM VENTILATION. DO NO RELEASE INTO SOIL, SEWERS,

NATURAL BODIES OF WATER. WEAR PROTECTIVE EQUIPMENT (PPE). CAREFULLY MOP UP OR VACUUM SPILL AND TRIPLE RINSE WITH WATER INTO SUITABLE PLASTIC CONTAINER. RELEASE OF REPORTABLE QUANTITY (RQ) REQUIRES NOTIFICATION OF AUTHORITIES.

Neutralizing Agent:SODIUM BICARBONATE, SODA ASH/SLAKED LIME.

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

Handling and Storage Precautions:HANDLING: USE "BUDDY SYSTEM" WHEN WORKING WITH CHEMICALS. DO NOT GET IN EYES, ON SKIN OR CL  
OTHING. DO

NOT BREATHE VAPOR, MIST OR GAS. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING. TR IPLE RINSE CONTAINER CLEAN BEFORE DISCARDING. PUT NOTHING ELSE IN THIS CONTAINER.

Other Precautions:STORAGE: KEEP CONTAINER TIGHTLY CLOSED IN UPRIGHT POSITION. STORE AT 60-90F AWAY FROM INCOMPATIBLE MATERIALS AND PHYSICAL HAZARDS. DO NOT REMOVE OR DEFACE CONTAINER LABELS.

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

Respiratory Protection:IF E  
NGINEERING CONTROLS ARE NOT FEASIBLE, THE  
PRESPIRATORY PROTECTION PROGRAM MUST COMPLY WITH OSHA 29 CFR  
1910.134, REQUIREMENTS.

Ventilation:LOCAL EXHAUST VENTILATION IS REQUIURED TO MEET THE PERMISSABLE EXPOSURE LIMITS (PEL) DURING USE OF 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, AND PROTECTIVE CLOTHING, AS

NEEDED. PROVIDE A LOCAL EYE WASH STATION AND SAFETY SHOWER NEAR WORK AREA. DO NOT WEAR CONTACT LENSES.

Work Hygienic Practices:USE REASONABLE CARE IN HANDLING THIS PRODUCT. WASH HANDS AFTER USE AND BEFORE EATING.

Supplemental Safety and Health

EMERGENCY OVERVIEW: COLORLESS LIQUID WITH SLIGHT PUNGENT ODOR. DANGER! CORROSIVE TO SKIN, EYES, AND RESPIRATORY SYSTEM. ENVIRONMENTAL HAZARD. EMERGENCY RESPONSE GUIDEBOOK, GUIDE #157.

===== Physical/Chemical Properties =====  
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HCC:C1

Boiling Pt:>100.C, 212.F

Melt/Freeze Pt:9,000

LITERS; EXTREMELY HAZARDOUS SUBSTANCE: NONE. 3. EPCRA HAZARD CATEGORIES: IMMEDIATE (ACUTE) HEALT H: YES; DELAYED (CHRONIC) HEALTH: YES; FIRE: NO; SUDDEN RELEASE OF PRESSURE: NO; REACTIVITY: NO. 4. TSCA STATEMENT: ALL INGREDIENTS OF THIS PRODUCT ARE LISTED UNDER THE TOXIC SUBSTANCES CONTROL ACT (T SCA).

State Regulatory Information:STATE REGULATIONS: CALIFORNIA PROP. 65: NOT APPLICABLE.

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

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