

ARCOS ALLOYS DIV OF HOSKINS MFG CO -- 317, STAINLESS STEEL ALLOYS -- 3439-01-067-0697

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

Product ID:317, STAINLESS STEEL ALLOYS

MSDS Date:04/10/1998

FSC:3439

NIIN:01-067-0697

Status Code:A

MSDS Number: CLJTJ

=== Responsible Party ===

Company Name:ARCOS ALLOYS DIV OF HOSKINS MFG CO

Address:#1 ARCOS DRIVE

Box:308

City:MTCARMEL

State:PA

ZIP:17851

Country:US

Info Phone

Num:717-339-5200, CHEMTREC 800-424-9300

Emergency Phone Num:717 339-5200 800-424-9300

Resp. Party Other MSDS Num.:MSDS NO. A1000

Chemtrec Ind/Phone:(800)424-9300

CAGE:03805

=== Contractor Identification ===

Company Name:ARCOS ALLOYS DIV OF HOSKINS MFG CO

Address:#1 ARCOS DRIVE

Box:308

City:MTCARMEL

State:PA

ZIP:17851

Country:US

Phone:717-339-5200, CHEMTREC 800-424-9300

CAGE:03805

Company Name:KAMPI COMPONENTS CO., INC.

Address:210 RT 13

Box:721

City:BRISTOL

State:PA

ZIP:19007-3517

Country:US

Pho

ne:215-736-2000  
Contract Num:SP0490-01-M-XG95  
CAGE:7Z016

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

Ingred Name:CHROMIUM  
CAS:7440-47-3  
RTECS #:GB4200000  
= Wt:20.5  
OSHA PEL:1 MG/M3  
ACGIH TLV:0.5 MG/M3  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

Ingred Name:MANGANESE  
CAS:7439-96-5  
RTECS #:OO9275000  
= Wt:2.5  
OSHA PEL:C5 MG/M3  
ACGIH TLV:5 MG/M3

Ingred Name:IRON  
CAS:7439-89-6  
RTECS #:NO4565500  
Fraction by Wt: BALANCE

Ingred Name:NICKEL  
CAS:7440-02-0  
RTECS #:QR5950000  
= Wt:15.  
OSH  
A PEL:1 MG/M3  
EPA Rpt Qty:100 LBS  
DOT Rpt Qty:100 LBS

Ingred Name:MOLYBDENUM  
CAS:7439-98-7  
RTECS #:QA4680000  
= Wt:4.  
OSHA PEL:15 MG/M3  
ACGIH TLV:10 MG/M3

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

Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES  
Health Hazards Acute and Chronic:ACUTE: ELECTRIC ARC WELDING RAYS CAN  
INJURE EYES AND BURN SKIN. DUST, FUMES AND GASES PRODUCED DURING  
USE ARE DNGEROUS TO HEALTH. LUNG DAMAGE MAY RESULT FROM  
OVEREXPOSURE.

CHRONIC: MAY RESULT IN NEURO LOGICAL DAMAGE, LUNG FIBROSIS, PNEUMOCONIOSIS AND OTHER LUNG DISEASES.

Explanation of Carcinogenicity:WARNING: NICKEL, CHROMIUM, AND SILICA ARE KNOWN TO CAUSE CANCER. EXPOSURES TO THESE CHEMICALS MUST BE MAINTAINED BELOW THE LEVELS SPECIFIED.

Effects of Overexposure:ELECTRIC ARC WELDING RAYS CAN INJURE EYES AND BURN SKIN. DUST, FUMES AND GASES PRODUCED DURING USE ARE DANGEROUS TO YOUR HEALTH. LUNG DAMAGE MAY RESULT FROM OVEREXPOSURE. SHORT

TERM EXPOSURE TO WELDIN G FUMES MAY RESULT IN DISCOMFORT, DIZZINESS, NAUSEA AND DRYNESS & IRRITATION OF THE THROAT. ARC RAYS CAN INJURE EYES AND BURN SKIN. ELECTRIC SHOCK CAN KILL. ACUTE EXPOSURE CAN CAUSE WATERY EYES, HEADACHE, BREATHING DIFFICULTY, FREQUENT COUGHING &/OR CHEST PAINS. SOME TOXIC GASES MAY CAUSE PULMONARY EDEMA, ASPHYXIATION AND EXCESSIVE EXOSURE CAN BE FATAL.

Medical Cond Aggravated by Exposure:SOME WORKERS MAY EXPERIENCE DISCOMFORT AT CONCENTRATIONS BE LOW THE THRESHOLD LIMIT VALUES AND OTHERS MAY BE AFFECTED BY A PRE-EXISTING CONDITION OR OTHER OCCUPATIONAL ILLNESS DUE TO WIDE VARIATION.

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

First Aid:INHALATION: REMOVE TO FRESH AIR. IF BREATHING IS DIFFICULT ADMINISTER OXYGEN. IF NOT BREATHING, BEGIN ARTIFICIAL RESPIRATION. IF NO DETECTABLE PULSE BEGIN EXTERNAL HEART MASSAGE. SKIN: WASH AFFECTED AREA WITH SOAP AND WATER. EYES: FLUSH WITH LARGE AMOUNTS OF FRESH WATER FOR AT LEAST 15 MINUTES. INGESTION: SEEK MEDICAL ATTENTION. \*\*\*IN ALL CASES, SEEK MEDICAL ATTENTION FOR FIRST AID.\*\*\*

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

Flash Point:NONFLAMMABLE  
Extinguishing Media:NONFLAMMABLE; HOWEVER, ARCS SPARKS AND MOLTEN METAL CAN IGNITE FLAMMABLES AND COMBUSTIBLES OR CAUSE EXPLOSIONS.

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

Spill Release Procedures:CLEAN UP ANY GRINDING DUST OR W

## ASTE RESIDUES

AND PLACE IN SUITABLE DEPARTMENT OF TRANSPORTATION (DOT) APPROVED CONTAINERS AND DISPOSE OF IN FULL COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. A VOID INHALATION AND SKIN EXPOSURE.

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

Respiratory Protection:USE WELD FUME RESPIRATOR OR AIR SUPPLIED RESPIRATOR WHEN CUTTING, GRINDING OR WELDING IN A CONFINED SPACE OR WHERE LOCAL EXHAUST OR GENERAL VENTILATION DOES NOT KEEP EXPOSURE BEL

OW RECOMMENDED LIMITS. MONITOR THE AIR QUALITY INSIDE THE WELDER'S HELMET, IF WORN, AND/OR THE WORKER'S BREATHING ZONE TO DETERMINE IF A RESPIRATOR IS REQUIRED AND THE TYPE NEEDED.

Ventilation:USE WELD VENTILATION WHEN CUTTING, GRINDING OR WELDING TO KEEP THE DUST, FUMES AND GASES FROM THE WORKERS BREATHING ZONE AND GENERAL AREA.

Protective Gloves:WEAR GLOVES AND FLAME RETARDANT CLOTHING.

Eye Protection:USE OSHA APPROVED GOGGLES, GLASSES AND/OR FACE SHIELD WITH FILTER LENS.

Other Protective Equipment:USE ONLY NIOSH APPROVED RESPIRATORS. WEAR GLOVES/FLAME RETARDANT CLOTHING WHEN CUTTING, GRINDING, WELDING SO NOT EXPOSE SKIN TO RADIATION WHEN CUTTING OR WELDING, PROVIDE PROTECT SCREEN TO SHIELD OTHERS

Work Hygienic Practices:USE OSHA APPROVED GOGGLES, GLASSES &/OR FACE SHIELD WHEN CUTTING, GRINDING OR WELDING. IN ADDITION,WHEN HOT CUTTING OR WELDING, WEAR WELDING HELMET OR FACE SHIELD WITH FILTER LENS. SELECT WELDING SHADES

Supplemental Safety  
and Health

PER TIR CHEMICAL COMPOSITION: 62% IRON, 21.5% CHROMIUM, 11% NICKEL, 2.5% MANGANESE, 0.6% SILICON, 0.5% MOLYBDENUM AND 0.08% CARBON.

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

HCC:N1

Appearance and Odor:COVERED WELDING ELECTRODES; SOLID WIRE W/FLUX COATING. BARE FILLER: SOLID WIRE

### ===== Stability and Reactivity Data =====

WELDING AND HOT CUTTING FUMES AND GASES CANNOT BE CLASSIFIED SIMPLY. THEIR COMPOSITION AND QUANTI

TY ARE DEPENDENT ON THE METAL BEING  
WELDED, THE PROCEDURES, PROCESSES AND TYPE OF WIRE OR ELECTRODES  
USED.

Hazardous Decomposition Products:MAY INCLUDE OXIDES OF THE METALS,  
CHROMATES & COMPLEX METALLICS, GASEOUS REACTION PRODS MAY INCLUDE  
CARBON MONOXIDE, OZONE, NITROGEN OXIDES, CHLORINATED SOLVENTS.MAY  
BE DECOMPOSED;TOXIC GAGES, PHOSGENE.

===== Disposal Considerations =====

Waste Disposal Methods:CLEAN UP ANY GRINDING DUST OR WASTE RESIDUES  
AND  
PLACE IN SUITABLE DEPARTMENT OF TRANSPORTATION (DOT) APPROVED  
CONTAINERS AND DISPOSE OF IN FULL COMPLIANCE WITH FEDERAL, STATE  
AND LOCAL REGULATIONS. A VOID INHALATION AND SKIN EXPOSURE.

===== Regulatory Information =====

SARA Title III Information:ARCOS WELDING RODS CONTAIN TOXIC CHEMCALS  
SUBJECT TO THE REPORTING REQUIREMENTS OF SEC 313 OF TITLE III OF  
SUPERFUND.

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

Di  
sclai  
mer (provided with this information by the compiling agencies):  
This information is formulated 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.