

ARCOS ALLOYS DIV HOSKINS MFG CO -- BARE-WIRE FILLER METALS, 316 -- 3439-00-201-9128  
===== Product Identification =====

Product ID:BARE-WIRE FILLER METALS, 316

MSDS Date:05/01/1994

FSC:3439

NIIN:00-201-9128

MSDS Number: CBQFM

=== Responsible Party ===

Company Name:ARCOS ALLOYS DIV HOSKINS MFG CO

Address:1 ARCOS DR

City:MT CARMEL

State:PA

ZIP:17851

Country:US

Info Phone Num:717-339-5200

Emergency Ph

one Num:800-424-9300(CHEMTREC)

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:ARCOS ALLOYS DIVISION OF HOSKINS MFG. CO.

Address:#1 ARCOS DRIVE

Box:City:MT CARMEL

State:PA

ZIP:17851

Country:US

Phone:570-339-5200; 717-339-5200

CAGE:19270

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

Ingred

Name:CHROMIUM; (CR) (SARA 313) (CERCLA)  
CAS:7440-47-3  
RTECS #:GB4200000  
Fraction by Wt: 20%  
OSHA PEL:1 MG/M3  
ACGIH TLV:0.5 MG/M3  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

Ingred Name:MANGANESE; (MN) (SARA 313)  
CAS:7439-96-5  
RTECS #:OO9275000  
Fraction by Wt: 2.5%  
OSHA PEL:5 MG/M3 DUST, C  
ACGIH TLV:5 MG/M3 DUST

Ingred Name:MOLYBDENUM; (MO)  
CAS:7439-98-7  
RTECS #:QA4680000  
Fraction by Wt: 3%  
OSHA PEL:10 PPM  
ACGIH TLV:10 PPM

Ingred Name:NICKEL; (NI) (SARA 313) (CERCLA)  
CAS:7440-02-0  
RTECS #:QR5950000  
Fraction by Wt: 14%  
OSHA PEL:1 MG/M3  
ACGIH TLV:1 MG/M3

Ingred Name:IRON; (FE)  
CAS:7439-89-6  
RTECS #:NO4565500  
Fraction by Wt: BALANCE  
OSHA PEL:N/K  
ACGIH TLV:N/K

Ingred Name:HAZ DECOMP PROD:BEING WELDED, PROCS, PROCESSES & TYPE OF  
WIRE/ELECTRODES USED. OTHER INFLUENCING FACTORS ARE (ING 7)  
RTECS #:9999999ZZ

Ingred Name:ING 6:PRESENCE OF CONTAMS IN ATM. DECOMP PRODS FROM  
WELDING/CUTTING OPERATION INCL THOSE FROM VOLATILIZATION, RXN(ING  
8)  
RTECS #:9999999ZZ

Ingred Name:ING 7:&/OR

OXIDATION OF INGS & MAY INCL OXIDES OF METALS,  
CHROMATES & COMPLEX METALLICS. GASEOUS RXN PRODS MAY (ING 9)  
RTECS #:9999999ZZ

Ingred Name:ING 8:INCL CARBON MONOXIDE, OZONE & NITROGEN OXIDES.  
CHLORINATED SOLVS MAY BE DECOMPOSED INTO TOX GASES SUCH AS (ING 10)  
RTECS #:9999999ZZ

Ingred Name:ING 9:PHOSGENE. WHEN ELECTRODES ARE CONSUMED, FUME & GAS  
DECOMP PRODS GENERATED ARE DIFF IN FORM FROM INGS. NEW (ING 11)  
RTECS #:9999999ZZ

Ingred Name:ING 10:COMPDS NOT IN ELECTRODES MAY FORM. KNOW  
N GASES &  
FUMES THAT MAY FORM DURING WELDING/HOT CUTTING ARE: (ING 12)  
RTECS #:9999999ZZ

Ingred Name:ING 11:ALUMINUM FUMES, CARBON MONOXIDE, CHROMIUM,  
CHROMIUM(CHROMATES), COBALT FUME, COPPER FUME, IRON OXIDE (ING 13)  
RTECS #:9999999ZZ

Ingred Name:ING 12:FUME, MANGANESE FUME, MOLYBDENUM, NICKEL, TUNGSTEN,  
NITROGEN DIOXIDE, OZONE &/OR PHOSGENE.  
RTECS #:9999999ZZ

Ingred Name:EFTS OF OVEREXP:EDEMA, ASPHYX & EXCESSIVE EXPOS CAN BE  
FATAL. CHRONIC:EXPOS MAY RSLT IN NEUROLOGICAL DMG,  
LUNG (ING 15)  
RTECS #:9999999ZZ

Ingred Name:ING 14:FIBROSIS, PNEUMOCONIOSIS & OTHER LUNG DISEASES. IN  
CASE OF ELEC SHOCK, TURN OFF POWER PRIOR TO REMOVAL (ING 16)  
RTECS #:9999999ZZ

Ingred Name:ING 15:FROM EXPOSURE AREA & ADMINISTRATION OF FIRST AID.  
RTECS #:9999999ZZ

Ingred Name:OTHER PROT EQUIP:CUTTING, GRINDING OR WELDING. PROVIDE  
PROTECTIVE SCREENS TO SHIELD OTHERS.  
RTECS #:9999999ZZ

Ingred Name:EXPLAN OF CARCIN:ON CARCINOGENS, 1994:ANTICIPATED TO BE  
CARCINOGEN. HUMAN:LUNGS,

NASAL CAVITIES.  
RTECS #:9999999ZZ

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

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO  
Health Hazards Acute and Chronic:THIS PROD POSES NO HLTH HAZ AS SHIPPED, BUT MAY POSE HLTH HAZ DURING USE. ELEC ARC WELDING RAYS CAN INJURE EYES & BURN SKIN. DUST, FUMES & GASES CAN BE DANGEROUS TO YOUR HLTH. LUNG DMG MAY RSLT FROM OVEREXP. FUMES, GASES & DUST CAN BE HLTHHAZ THRU INHAL. ACUTE:SHORT TERM EXPOS TO WELDING FUMES, GASES/(EFTS OF OVEREXP)  
Explanation of Carcinogenicity:NICKEL:IARC MONOGRAPHS ON EVAL OF CARCIN RISK OF CHEMS TO MAN, VOL 49, PG 257, 1990:GRP 2B. NTP 7TH ANNUAL RPT (ING 18)  
Effects of Overexposure:HLTH HAZ:DUST MAY RSLT IN DISCOMFORT SUCH AS DIZZ, NAUS, FEVER, DRYNESS &/OR IRRIT OF NOSE, THROAT & EYES. SKIN SENSITIVITY MAY ALSO BE NOTED. ACUTE EXPOS CAN RSLT IN SAME SYMPS EXCEPT TO GREATER DEGREE AS WELL AS WATERY EYES, HDCH, BRTHG DFCLTY, FREQUENT COUGH &/OR CHEST PAINS. SOME TOX GASES MAY CAUSE PULM (ING 14)  
Medical Cond Aggravated by Exposure:SOME WORKERS MAY EXPERIENCE DISCOMFORT AT CONCS BELOW TLVS & OTHERS MAY BE AFFECTED BY A PRE-EXISTING CONDITION OR OTHER OCCUP ILLNESS BECAUSE OF WIDE VARIATION IN INDIVIDUAL SUSCEPTIBILITIES.

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

First Aid:INHAL: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 W/SO AP & WATER. EYES:FLUSH W/LARGE AMOUNTS OF FRESH WATER FOR AT LEAST 15 MINUTES. INGEST:SEEK MEDICAL ATTENTION. IN ALL CASES, SEEK MEDICAL ATTENTION FOR FIRST AID.

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

Flash Point:NONFLAMMABLE  
Extinguishing Media:MEDIA SUITABLE

FOR SURROUNDING FIRE .

Fire Fighting Procedures:USE NIOSH/MSHA APPROVED SCBA & FULL PROTECTIVE EQUIPMENT .

Unusual Fire/Explosion Hazard:ARCS, SPARKS & MOLTEN METAL CAN IGNITE FLAMMABLES & COMBUSTIBLES OR CAUSE EXPLOSIONS.

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

Spill Release Procedures:CLEAN UP ANY GRINDING DUST OR WASTE RESIDUES & PLACE IN SUITABLE DOT APPROVED CONTAINERS. AVOID INHALATION & SKIN EXPOSURE.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:DO NOT EXPOSE SKIN TO RADIATION WHEN HOT CUTTING OR WELDING.

Other Precautions:REFER TO FOLLOWING SOURCES FOR ADDNL IMPORTANT INFO:  
ANSI Z49.1 - AMERICAN WELDING SOCIETY, P.O. BOX 351040, MIAMI, FL 33135; OSHA (29CFR 1910) - U.S. DEPT OF LABOR, WASHINGTON D.C. 20210.

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

Respiratory Protection:USE NIOSH/MSHA APPRVD WELD FUME RESP/AIR SUPPLIED RESP WHEN CUTTING, GRINDING/WELDING IN CONFINED SPACE/WHERE LOC EXHST/GEN VENT DOES NOT KEEP EXPOS BELOW REC LIMS. MONITOR AIR QUALITY INSIDE WELDER'S HELMET, IF WORN, &/OR WORKER'S (SUPDAT)

Ventilation:USE ENOUGH VENT WHEN CUTTING, GRINDING/WELDING TO KEEP DUST, FUMES & GASES FROM WORKERS BRTHG ZONE & GEN AREA. (SUPDAT)

Protective Gloves:WELDING GLOVES.

Eye Protection:ANSI APPROVED CHEM WORKERS GOGGS(SUPDAT)

Other Protective Equipment

:EYE WASH FOUNTAIN & DELUGE SHOWER WHICH MEET ANSI DESIGN CRITERIA . WEAR FLAME RETARDANT CLTHG WHEN (ING 17)

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

RESP PROT:BRTHG ZONE TO DETERMINE IF RESP IS REQD & TYPE NEEDED. USE ONLY NIOSH/MSHA APPRVD RESPS. VENT:KEEP EXPOS BELOW LIMS SPECIFIED. EYE PROT:& FULL LGTH FCSHLD . IN ADDN, WHEN HOT CUTTING/WELDING, WEAR WELDING HELMET/FCSHLD W/FILTER LENS. SELECT WELDING LENS SHADE FROM AWS PUB

LICATION F2.2.

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

HCC:T6

Appearance and Odor:BARE FILLER METALS ARE SOLID WIRE.

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

Stability Indicator/Materials to Avoid:YES

NONE SPECIFIED BY MANUFACTURER.

Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products:WELDING & HOT CUTTING FUMES & GASES

CANNOT BE CLASSIFIED SIMPLY. THEIR COMPOSITION & QTY ARE DEPENDENT

ON

METAL (ING 6)

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

Waste Disposal Methods:DISPOSE OF IN FULL COMPLIANCE W/FEDERAL, STATE &  
LOCAL REGULATIONS.

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