

ARCOS ALLOYS -- STAINLESS STEEL ALLOY, 309 -- 3439-01-190-0661

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Product Identification
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Product ID:STAINLESS STEEL ALLOY, 309
MSDS Date:06/08/1990
FSC:3439
NIIN:01-190-0661
MSDS Number: BVNGV
=== Responsible Party ===
Company Name:ARCOS ALLOYS
Address:#1 ARCOS DRIVE
City:MT CARMEL
State:PA
ZIP:17851
Country:US
Info Phone Num:717-339-5200
Emergency Phone Num:800-424-9300(CHEMTREC)
CAGE:G
O252

=== Contractor Identification ===
Company Name:ARCOS ALLOYS
Address:1 ARCOS DR
Box:308
City:MT CARMEL
State:PA
ZIP:17851-0308
Country:US
Phone:717-339-5200
CAGE:GO252
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

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Composition/Information on Ingredients
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Ingred Name:CHROMIUM; (CR)
CAS:7440-47-3
RTECS #:GB4200000
Fraction by Wt: 25%
OS

HA 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 III)
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:NICKEL; (NI) (SARA III)
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:SUPDAT:WELDING/HOT CUTTING ARE: ALUMINUM FUMES, CARBON MONOXIDE, CHROMIUM, CHROMIUM (CHROMATES), COBALT FUME, (ING 6)
RTECS #:9999999ZZ

Ingred Name:NG 5:COPPER FUME, IRON OXIDE FUME, MANGANESE FUME, MOLYBDENUM, NICKEL, TUNGSTEN, NITROGEN DIOXIDE, OZONE, PHOSGENE.
RTECS #:9999999ZZ

Ingred Name:EXPLAN OF CARCIN:HUMAN/ANIMAL:LUNG CANCER, SKIN ULCERS. NICKEL:IARC MONOGRAPHS ON EVAL OF CARCIN RISK OF CHEMS TO(ING 8)
RTECS #:9999999ZZ

Ingred Name:ING 7:MAN, VOL 49, PG 257, 1990:GRP 2B. NTP 6TH ANNUAL REPORT ON CARCINOGENS,

1991:ANTICIPATED TO BE CARCINOGEN. (ING 9)
RTECS #:9999999ZZ

Inged Name:ING 8:HUMAN:LUNG, NASAL CAVITIES.
RTECS #:9999999ZZ

Inged Name:EFTS OF OVEREXP:CHRONIC:EXPOS MAY RSLT IN NEUROLOGICAL DMG,
LUNG FIBROSIS, PNEUMOCONIOSIS & OTHER LUNG DISEASES.
RTECS #:9999999ZZ

Inged Name:RESP PROT:WORN, &/OR WORKER'S BRTHG ZONE TO DETERMINE IF
RESP IS REQUIRED & TYPE NEEDED.
RTECS #:9999999ZZ

Inged Name:VENT:KEEP EXPOSURE BELOW LIMITS SPECIFIED.
RTECS #:9999999ZZ

Inged Name:EYE PROT:WHEN CUTTING, GRINDING/WELDING. IN ADDN, WHEN HOT
CUTTING/WELDING, WEAR WELDING HELMET & FACE SHIELD W/(ING 14)
RTECS #:9999999ZZ

Inged Name:ING 13:FILTER LENS. SELECT WELDING LENS SHADE FROM AWS
PUBLICATION F2.2.
RTECS #:9999999ZZ

Inged Name:OTHER PROT EQUIP:SCREENS TO SHIELD OTHERS.
RTECS #:9999999ZZ

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

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.

Routes of Entry: Inhalation:YES Skin:NO 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. ACUTE:SHORT TERM
EXPOS TO WELDING FUMES, GASES/DUST MAY RSLT IN DISCOMFORT SUCH AS
DIZZ, NAUS, (EFTS OF OVEREXP)

Explanation of Carcinogenicity:CHROMIUM:IARC MONOGRAPHS, VOL 49, PG 49,
1990:G

RP 1. NTP 6TH ANNUAL RPT ON CARCINS, 1991:KNOWN TO BE CARCIN.

(ING 7)

Effects of Overexposure:HLTH HAZ: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, F REQUENT COUGH &/OR CHEST PAINS. SOME TOX GASES MAY CAUSE PULM EDEMA, ASPHY & EXCESSIVE EXPOS CAN BE FATAL.

(ING 10)

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 THE WIDE VARIATION IN INDIVIDUAL SUSCEPTIBILITIES.

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

First Aid:IN CASE OF ELEC SHOCK, TURN OFF POWER PRIOR TO REMOVAL FROM EXPOS AREA & ADMIN OF FIRST AID. INHAL:REMOVE TO FRESH AIR. IF BRTHG IS DFCLT ADMIN OXYGEN. IF NOT BRTHG BEGIN ARTF RESP. IF NO DETECTABLE P ULSE BEGIN EXTERNAL HEART

MASSAGE. SKIN:WASH AFFECTED

AREA W/SOAP & WATER. EYES:FLUSH W/LG AMTS OF WATER FOR AT LST 15 MINS. INGEST:SEEK MED ATTN. IN ALL CASES, SEEK MED ATTN 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 FLAMMABLE

S & COMBUSTIBLES OR CAUSE EXPLOSIONS.

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===== 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.

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

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

& SKIN EXPOSURE.

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

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Exposure Controls/Personal Protection
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Respiratory Protection:USE ONLY NIOSH/MSHA APPRVD RESPS. USE WELD FUME
RESP/AIR SUPPLIED RESP WHEN CUTTING, GRINDING/WELDING IN CONFINED
SPACE/WHERE LOC EXHST/GEN VENT DOSE NOT KEEP EXPOS BELOW REC LIMS.
MO

NITOR AIR QUALITY INSIDE WELDER'S HELMET, IF (ING 11)

Ventilation:USE ENOUGH VENT WHEN CUTTING, GRINDING/WELDING TO KEEP
DUST, FUMES & GASES FROM WORKERS BRTHG ZONE & GEN AREA. (ING 12)

Protective Gloves:WELDER'S GLOVES.

Eye Protection:USE OSHA APPRVD GOGGS & FCSHLD (ING 13)

Other Protective Equipment:EMER EYE WASH & DELUGE SHOWER . WEAR FLAME
RETARDANT CLTHG WHEN CUTTING, GRINDING/WELDING. PROVIDE PROT (ING
15)

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Sa
fety and Health

HAZ DECOMP PROD:CONTAMS IN ATM. DECOMP PRODS MAY INCL OXIDES OF METALS,
CHROMATES & COMPLEX METALLICS. GASEOUS RXN PRODS MAY INCL CARBON
MONOXIDE, OZONE & NITROGEN OXIDES. CHLORINATED SOLVS MAY BE DEC
OMPOSED INTO TOX GASES SUCH AS PHOSGENE. FUMES & GASES MAY VARY IN
FORM. KNOWN GASES & FUMES THAT MAY FORM DURING(ING 5)

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Physical/Chemical Properties
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Appearance and Odor:BARE FILLER METALS ARE A SOLID WIRE.

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Stability and Reactivity Data
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Stability Indicator/Materials to Avoid:YES
NONE SPECIFIED BY MANUFACTURER.

Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products:COMPOSITION & QUALITY OF FUMES & GASES
ARE DEPENDENT UPON METAL BEING WELDED, PROCS, PROCESSES, ELECTRODES
USED,(SUPDAT)

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Disposal Considerations
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Waste Disposal Methods:DISPOSE OF IN FULL COMPLIANCE W/FEDERAL, STATE &
LOCA

L REGULATIONS.

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