

HAYNES INTERNATIONAL INC SUB OF CABOT CORP -- R-41 WELDING ROD -- 3439-00-146-3779

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

Product ID:R-41 WELDING ROD

MSDS Date:05/01/1989

FSC:3439

NIIN:00-146-3779

MSDS Number: BKSHP

=== Responsible Party ===

Company Name:HAYNES INTERNATIONAL INC SUB OF CABOT CORP

Address:1020 W PARK AVE

Box:9013

City:KOKOMO

State:IN

ZIP:46902-9013

Country:US

Info Phone Num:317-456-662

5

Emergency Phone Num:317-456-6894

CAGE:80357

=== Contractor Identification ===

Company Name:ASTROLITE ALLOYS DIV OF ASTRO METALLUGICAL

Address:709 VIA ALONDRA

Box:City:CAMARILLO

State:CA

ZIP:93010-8714

Country:US

Phone:805-484-3621

CAGE:2R602

Company Name:HAYNES INTERNATIONAL INC SUB OF CABOT CORP

Address:1020 W PARK AVE

Box:9013

City:KOKOMO

State:IN

ZIP:46904-9013

Country:US

Phone:318-263-2002;765-456-6614

CAGE:80357

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

Ingred

Name:NICKEL (SARA III)
CAS:7440-02-0
RTECS #:QR5950000
Fraction by Wt: 52%
Other REC Limits:NONE SPECIFIED
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3; 9192

Ingred Name:COBALT (SARA III)
CAS:7440-48-4
RTECS #:GF8750000
Fraction by Wt: 11%
Other REC Limits:NONE SPECIFIED
OSHA PEL:0.1 MG/M3;AS CO
ACGIH TLV:0.05 MG/M3;DUST 9293

Ingred Name:CHROMIUM (SARA III)
CAS:7440-47-3
RTECS #:GB4200000
Fraction by Wt: 19%
Other REC Limits:NONE SPECIFIED
OSHA PEL:1 MG/M3
ACGIH TLV:0.5 MG/M3; 9192
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:MOLYBDENUM
CAS:7439-98-7
RTECS #:QA4680000
Fraction by Wt: 10%
Other REC Limits:NONE SPECIFIED
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3; 9293

Ingred Name:IRON
CAS:7439-89-6
RTECS #:NO4565500
Fraction by Wt: 5.0%
Other REC Limits:NONE SPECIFIED
OSHA PEL:10 MG/M3(IRON OXIDE)
ACGIH TLV:5 MG/M3 (IRON OXIDE)

Ingred Name:SILICON
CAS:7440-21-3
RTECS #:VW0400000
Fraction by Wt: 0.5%
Other REC Limits:NONE SPECIFIED
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:MANGANESE (SARA III)
CAS:7439-96-5
RTECS #:OO9275000
Fraction by Wt: 0.1%
Other REC Limits:NONE SPECIFIED
OSHA PEL:(C) 5 MG/M3 DUST
ACGIH TLV:5 MG/M3 DUST 9293

Ingred Name:ALUMINUM (SARA III)
CAS:7429-90-5
RTECS #:BD0330000
Fraction by Wt: 1.5%
Other REC Limits:NONE SPECIFIED
OSHA PEL:15MG/M3 DUST/5 FUME
ACGIH TLV:10MG/M3 DUST; 9192

Ingred Name:TITANIUM, METAL
CAS:7440-32-6
RTECS #:XR1700000
Other REC Limits:NONE SPECIFIED
OSHA PEL:10 MG/M3 (TIO2)
ACGIH TLV:10 MG/M3 (TIO2)

Ingred Name:BORON (TOTAL) AS BORON OXIDE
Fraction by Wt: 0.006%
Other REC Limits:NONE SPECIFIED
OSHA PEL:10 MG/M3
ACGIH TLV:10 MG/M3

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

LD50 LC50 Mixture:TLV FOR WELDING FUMES IS 5 MG/M3
Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO
Health Hazards Acute and Chronic:ACUTE: FUMES AND GASES CAN CAUSE EYES
AND UPPER RESPIRATORY SYSTEM IRRITATION, AND CENTRAL NERVOUS SY
STEM
EFFECTS. ARC RAYS CAN INJURE EYES AND BURN SKIN. ELECTRIC SHOCK CAN
KILL. NOISE CAN DAMAGE HEARING. CHRONIC: NEUROLOGICAL DAMAGE, LUNG
FIBROSIS, PNEUMOCONIOSIS.
Explanation of Carcinogenicity:NICKEL AND CHROMIUM ARE LISTED UNDER
IARC AND NTP.
Effects of Overexposure:SHORT TERM EXPOSURE: NAUSEA, FEVER, DIZZINESS,
DRYNESS, IRRITATION OF EYES, NOSE AND THROAT, SKIN SENSITIVITY.
ACUTE EXPOSURE: SAME SYMPTOMS TO HIGHER DEGREE AS WELL AS WATERY
EYES, HEADACHE, BREATHING

N G DIFFICULTY, FREQUENT COUGHING, CHEST PAINS.

Medical Cond Aggravated by Exposure:AGGRAVATION OF EXISTING RESPIRATORY OR ALLERGIC CONDITIONS.HIGHER LEVEL OF LUNG RELATED PROBLEMS AMONG SMOKERS.

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

First Aid:INHALATION: REMOVE FROM EXPOSURE. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IF NOT BREATHING, GIVE CPR. IF NO DETECTABLE PULSE, GIVE HEART MASSAGE. EYES: FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. SKIN: WASH WITH SOAP AND WATER. INGESTION: SEEK MEDICAL ATTENTION.

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

Extinguishing Media:NON-FLAMMABLE. USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE.

Fire Fighting Procedures:WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A FULL FACED SELF CONTAINED BREATHING APPARATUS. EVACUATE AREA. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY.

Unusual Fire/Explosion Hazard:COMBUSTION OR HEAT OF FIRE MAY PRODUCE HAZARDOUS DECOMPOSITION PRODUCTS AND VAPORS.

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

Spill Release Procedures:CLEAN UP ANY GRINDING DUST OR WASTE RESIDUE AND PLACE IN APPROPRIATE DISPOSAL CONTAINER. AVOID INHALATION AND SKIN EXPOSURE.

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

Handling and Storage Precautions:STORE IN DRY AREA. ELECTRODES EXPOSED TO MOISTURE MAY EXPLODE VIOLENTLY IF USED. DRY MOIST RODS BY BAKING AT 300F FOR TEN HOURS.

Other Precautions:TRAIN WELDER TO KEEP HIS HEAD OUT OF THE FUMES. MONITOR AIR TO ENSURE ACCEPTABLE EXPOSURES. AVOID ELECTRICAL SHOCK BY MAINTAINING DRY WORK AREA.

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

Respiratory Protection:FUME RESPIRATOR OR AIR SUPPLIED RESPIRATOR IN CONFINED SPACES OR WHERE VENTILATION DOES NOT KEEP EXPOSURE BELOW TLV.

Ventilation:LOCAL EXHAUST TO KEEP BELOW TLV.

Protective Gloves:WELDER'S GLOVES.

Eye Pro

tection:HELMET OR FACE SHIELD WITH FILTER LENS.

Other Protective Equipment:SUBSTANTIAL DARK CLOTH, ARM PROTECTOR,
APRON, HAT AND SHOULDER PROTECTION. AIR SAMPLING TO DETERMINE
CORRECTIVE MEASURES

Work Hygienic Practices:WASH HANDS THOROUGHLY BEFORE EATING, SMOKING OR
USING SANITARY FACILITIES.

Supplemental Safety and Health
NONE.

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

HCC:N1

Spec Gravity:7-9

Solubility in Water:INSOLUBLE

Appearance and Odor:WELDING ROD

1/16 INCH DIAMETER BY 36 INCHES LONG.

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

Stability Indicator/Materials to Avoid:YES

Stability Condition to Avoid:MOISTURE.

Hazardous Decomposition Products:FUMES OF METALS AND METAL OXIDES FROM
ELECTRODE AND BASE METAL, CARBON MONOXIDE, CARBON DIOXIDE, OZONE,
NITROGEN OXIDES.

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

Waste Disposal Methods:CONSULT WITH YOUR LOCAL ENVIRONMENTAL OFFICER.
DIS

POSE OF FUMES, FLUX OR WELD GRINDING RESIDUE FROM THE WORK AREA
OR FROM FILTERS IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL
ENVIRONMENTAL REGULATIONS.

Disclaimer (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 th

is

document should seek competent professional advice to verify and
assume responsibility for the suitability of this information to their
particular situation.