

SANDVIK STEEL CO. -- CORROSION RESISTING CHROMIUM ELECTRODES & RODS --  
3439-00-995-9722

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

Product ID:CORROSION RESISTING CHROMIUM ELECTRODES & RODS

MSDS Date:10/01/1985

FSC:3439

NIIN:00-995-9722

Status Code:A

MSDS Number: CHWZJ

=== Responsible Party ===

Company Name:SANDVIK STEEL CO.

Box:1220

City:SCRANTON

State:PA

ZIP:18501-1220

Country:US

Info Phone Num:717-587-

5191

Emergency Phone Num:717-587-5191

CAGE:1BT93

=== Contractor Identification ===

Company Name:SANDVIK STEEL CO.

Box:1220

City:SCRANTON

State:PA

ZIP:18501-1220

Country:US

Phone:717-587-5191

CAGE:1BT93

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

Ingred Name:CHROMIUM (SARA 313) (CERCLA)

CAS:7440-47-3

RTECS #:GB4200000

Fraction by Wt: 1-30%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:1 MG/M3

ACGIH TLV:0.5 MG/M3; 9596

EPA Rpt Qty:1 LB

DOT Rpt Qty:1 LB

Ingred Name:COPPER (

SARA 313) (CERCLA)  
CAS:7440-50-8  
RTECS #:GL5325000  
Fraction by Wt: 0-4%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:0.1MG/M3 FUME/1 DUST  
ACGIH TLV:0.2 MG/M3 FUME; 9596  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:IRON  
CAS:7439-89-6  
RTECS #:NO4565500  
Fraction by Wt: BALANCE  
Other REC Limits:NONE RECOMMENDED

Ingred Name:MANGANESE (SARA 313)  
CAS:7439-96-5  
RTECS #:OO9275000  
Fraction by Wt: 1-5%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:C, 5 MG/M3 (FUME)  
ACGIH TLV:0.2 MG/M3; 9596

Ingred Name:MOLYBDENUM  
CAS:7439-98-7  
RTECS #:QA4680000  
Fraction by Wt: 1-5%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:10 PPM.  
ACGIH TLV:10 PPM.

Ingred Name:NICKEL (SARA 313) (CERCLA)  
CAS:7440-02-0  
RTECS #:QR5950000  
Fraction by Wt: 1-35%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:1 MG/M3  
ACGIH TLV:1 MG/M3; 9596

Ingred Name:SILICON  
CAS:7440-21-3  
RTECS #:VW0400000  
Fraction by Wt: 0.4-2%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:15 MG/M3 TDUST  
ACGIH TLV:10 MG/M3 TDUST; 9596

===== Hazar

ds Identification =====

LD50 LC50 Mixture:NOT GIVEN FOR PRODUCT AS A WHOLE

Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO

Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES

Health Hazards Acute and Chronic:NOT HAZARDOUS AS SHIPPED/STORED.

HAZARD OCCURS WHEN MATERIAL IS USED IN WELDING PROCESS. EXPOSURE TO DUST, WELDING FUMES AND GASES MAY CAUSE METALLIC TASTE, NAUSEA, TIGHTNESS IN CHEST, FEVER, IRRITATION OF EYES, NOSE, THROAT AND SKIN, LOSS OF CO

NSCIOUSNESS/DEATH DUE TO WELDING GASES OR LACK OF OXYGEN.

Explanation of Carcinogenicity:THIS PRODUCT CONTAINS CHROMIUM AND NICKEL CONSIDERED POSSIBLE CARCINOGENS UNDER OSHA.

Effects of Overexposure:METALLIC TASTE, NAUSEA, TIGHTNESS IN CHEST, FEVER, IRRITATION OF EYES/NOSE/THROAT, SKIN IRRITATION, LOSS OF CONSCIOUSNESS, DEATH. LONG TERM EXPOSURE MAY RESULT IN SKIN SENSITIZATION, NEUROLOGICAL DAMAGE, RESPIRATORY DISEASE SUCH AS BRONCHIAL ASTHMA, LUNG FIBROSIS, PNEUMOCONIOSIS.

Medical Conditions Aggravated by Exposure:PREEXISTING RESPIRATORY OR ALLERGIC CONDITIONS MAY OCCUR IN SOME WORKERS.

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

First Aid:REMOVE FROM EXPOSURE AND OBTAIN PROMPT MEDICAL ATTENTION. IF VICTIM IS UNCONSCIOUS, ADMINISTER OXYGEN. IF NOT BREATHING, RESUSCITATE IMMEDIATELY.

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

Flash Point:NONFLAMMABLE

Lower Limits:NOT GIVEN

Upper Limits:NOT GIVEN

Extinguishing Media:

NONFLAMMABLE. USE EXTINGUISHING MEDIA SUITABLE FOR SURROUNDING FIRE.

Fire Fighting Procedures:WELDING ARC AND SPARKS CAN IGNITE COMBUSTIBLES. REFER TO ANSI Z49.1, SAFETY IN WELDING AND CUTTING, PUBLISHED BY THE AMERICAN WELDING SOCIETY FOR INFORMATION.

Unusual Fire/Explosion Hazard:NONE SPECIFIED BY MANUFACTURER.

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

Spill Release Procedures:COLLECT FOR RECLAMATION/DISPOSAL.

Neutralizing Agent:NONE SPECIFIED

IFIED BY MANUFACTURER.

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

Handling and Storage Precautions:ELECTRICAL SHOCK CAN KILL. TRAIN THE WELDER NOT TO TOUCH LIVE ELECTRICAL PARTS AND TO INSULATE HIMSELF FROM WORK AND THE WORK BEING GROUNDED.

Other Precautions:READ AND UNDERSTAND THE MANUFACTURER'S INSTRUCTIONS AND PRECAUTIONARY LABEL ON THE PRODUCT. SEE ANSI Z49.1, SAFETY IN WELDING AND CUTTING PUBLISHED BY THE AMERICAN WELDING SOCIETY, PO BOX 351040 , MIAM I, FL 33135 AND OSHA PUBLICATION 2206.

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

Respiratory Protection:USE RESPIRABLE FUME RESPIRATOR OR AIR SUPPLIED RESPIRATOR WHEN WELDING IN CONFINED SPACE RO WHERE LOCAL EXHAUST OR VENTILATION DOES NOT KEEP EXPOSURE BELOW TLV'S. USE ONLY NIOSH APPROVED RESPIRATORS I N ACCORDANCE WITH 29CFR1910.134.

Ventilation:USE ENOUGH VENTILATION , LOCAL EXHAUST AT THE ARC OR BOTH TO KEEP THE FUMES AND GASES BELOW TLV'S I N BREATHING ZONE.

Protective Gloves:WELDER'S GLOVES

Eye Protection:HELMET, FACE SHIELD W/FILTER LENS

Other Protective Equipment:HAND, HEAD & BODY PROTECTION TO PREVENT INJURY FROM RADIATION, SPARKS & ELECTRICAL SHOCK.

Work Hygienic Practices:WASH HANDS THOROUGHLY WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES.

Supplemental Safety and Health

REMOVE AND WASH CONTAMINATED CLOTHING BEFORE REUSE.

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

=====

HCC:N1

Boiling Pt:B.P. Text:NOT GIVEN

Melt/Freeze Pt:M.P/F.P Text:NOT GIVEN

Decomp Temp:Decomp Text:NOT GIVEN

Vapor Pres:NOT GIVEN

Vapor Density:NOT GIVEN

Spec Gravity:NOT GIVEN

Viscosity:NOT GIVEN

Evaporation Rate & Reference:NOT GIVEN

Solubility in Water:NOT GIVEN

Appearance and Odor:PRODUCTS ARE SOLID METALS SHAPED AS WIRE OF VARIOUS DIAMETERS AND FORMS.

Percent Volatiles by Volume:NIL

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

Stability Indicator/Mat

erials to Avoid: YES

NONE SPECIFIED BY MANUFACTURER.

Stability Condition to Avoid: NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products: CARBON MONOXIDE, OZONE, OXIDES OF NITROGEN, OXIDES OF METALS, CHROMATES, FLUORIDES, COMPLEX METALLICS

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

Waste Disposal Methods: PREVENT WASTE FROM CONTAMINATING SURROUNDING ENVIRONMENT. DISCARD ANY PRODUCT, RESIDUE, DISPOSAL CONTAINER OR LINER IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL 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 this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.