

SANDVIK STEEL CO -- SANDVIK -- 3439-00-460-7667

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

Product ID:SANDVIK
MSDS Date:04/01/1991
FSC:3439
NIIN:00-460-7667
MSDS Number: CDPXR
=== 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:CALCIUM CARBONATE; (CACO*2)
CAS:1317-65-3
RTECS #:EV9580000
Fraction by Wt: 1-10%
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3 TDUST

Ingred Name:CALCIUM FLUORIDE; (CAF*2)
CAS:7789-75-5
RTECS #:EW1760000
Fraction by Wt: 1-10%
OSHA PEL:2.5 MG/M3 (F) (MFR)
ACGIH TLV:2.5 MG/M3 (F) (MFR)

Ingred Name:CHROMIUM; (CR)

(SARA 313) (CERCLA)
CAS:7440-47-3
RTECS #:GB4200000
Fraction by Wt: 5-30%
OSHA PEL:1 MG/M3
ACGIH TLV:0.5 MG/M3
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:COPPER; (CU) (SARA 313) (CERCLA)
CAS:7440-50-8
RTECS #:GL5325000
Fraction by Wt: 0-4%
OSHA PEL:0.1MG/M3 FUME;1 DUST
ACGIH TLV:0.2 MG/M3 FUME
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:IRON; (FE)
CAS:7439-89-6
RTECS #:NO4565500
Fraction by Wt: BALANCE
OSHA PEL:10 MG/M3 (MFR)
ACGIH TLV:5 MG/M3 (MFR)

Ingred Name:MANGANESE; (MN) (SARA 313)
CAS:7439-96-5
RTECS #:OO9275000
Fraction by Wt: 1-10%
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: 1-10%
OSHA PEL:10 PPM
ACGIH TLV:10 PPM

Ingred Name:NICKEL; (NI) (SARA 313) (CERCLA)
CAS:7440-02-0
RTECS #:QR5950000
Fraction by Wt: 1-35%
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3

Ingred Name:NIOBIUM; (NB) (ALSO CALLED COLUMBIUM)
CAS:7440-03-1
RTECS #:QT9900000
Fraction by Wt: 1-10%
OSHA PEL:N/K
ACGIH TLV:N/K

ngred Name:POTASSIUM; (POTASSIUM (K))
CAS:7440-09-7
RTECS #:TS6460000
Fraction by Wt: 1-10%
OSHA PEL:N/K
ACGIH TLV:N/K

Ingred Name:SODIUM; (NA) (CERCLA)
CAS:7440-23-5
RTECS #:VY0686000
Fraction by Wt: 1-10%
OSHA PEL:N/K
ACGIH TLV:N/K

Ingred Name:SILICON; (SI)
CAS:7440-21-3
RTECS #:VW0400000
Fraction by Wt: 1-10%
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3 TDUST

Ingred Name:SODIUM FLUOALUMINATE; (SODIUM ALUMINUM FLUORIDE
(Na^3AlF_2))
CAS:15096-52-3
RTECS #:WA9625000
Fraction by Wt: 1-10
%
OSHA PEL:2.5 MG/M3 (F) (MFR)
ACGIH TLV:2.5 MG/M3 (F) (MFR)

Ingred Name:TITANIUM OXIDE; (TITANIUM DIOXIDE (TiO_2))
CAS:13463-67-7
RTECS #:XR2275000
Fraction by Wt: 1-20%
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3 TDUST

Ingred Name:SUPP DATA:GOGGLES, IF NECESSARY, TO SHIELD OTHERS.
RTECS #:9999999ZZ

Ingred Name:OTHER PROT EQUIP:SPKS & ELEC SHOCK. SEE ANSI Z49.1. THIS
MAY INCL ARM PROTECTORS, APRONS, HATS, SHOULDER PROT & (ING 17)
RTECS #:9999999ZZ

Ingred Name:ING 16:DARK SUBSTANTIAL CLOT

HING.
RTECS #:9999999ZZ

Ingred Name:HAZ DECOMP PROD:COATING, ETC, & FUMES & GASES (CARBON DIOXIDE, CARBON MONOXIDE, DINITROGEN TETROXIDE, HYDROGEN (ING 19)
RTECS #:9999999ZZ

Ingred Name:ING 18:FLUORIDE, NITRIC OXIDE, NITROGEN DIOXIDE, OZONE, PHOSGENE & PHOSPHINE). FOR MORE SPECIFIC INFO, CONT NEHC .
RTECS #:9999999ZZ

Ingred Name:EFTS OF OVEREXP:TO BE POTNTL CARCIN IN IARC MONOGRAPHS & LISTED BY OSHA/ACGIH AS POTNTL CARCIN (MFR).
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:WELDING CONSUMABLES APPLIC TO THIS MSDS AS SHIPPED ARE NON REACTIVE, NON FLAMM, NON EXPLO & ESSNTLY NON HAZ UNTIL WELDED. ELEC ARC WELDING MAY CREATE ONE/MORE OF FOLLOWING HLTH HAZS: FUMES & GASES CAN BE DANGEROUS TO YOUR HLTH. ACUTE:OVEREXP TO WELDING FUMES MAY RSLT IN DISCOMFORT SUCH AS DIZZ, NAUS OR(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 (SUPDAT)
Effects of Overexposure:HLTH HAZ:DRYNESS/IRRIT OF NOSE, THROAT/EYES. CHRONIC:OVEREXP TO WELDING FUMES CAN LEAD TO SIDEROSIS (IRON PRODS IN LUNGS), CNS DMG, SENSIT DERM & BELIEVED BY SOME INVESTIGATORS TO AFFECT PULM FUNC. AR C RAYS CAN INJURE EYES & BURN SKIN. ELEC SHOCK CAN KILL. CHROMIUM IS LISTED IN NTP ANNUAL RPT ON CARCINS & FOUND(ING 20)
Medical Cond Aggravated by Exposure:AGGRAVATION OF RESPIRATORY OR ALLERGIC CONDITIONS MAY AFFECT SOME EXPOSED INDIVIDUALS.

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

First Aid:REMOVE FROM EXPOSURE & CALL FOR MEDICAL AID. EMPLOY FIRST AID TECHNIQUE RECOMMENDED BY THE AMERICAN RED CROSS. INGEST:CALL MD IMMEDIATELY . INHAL:REMOVE TO FRESH AIR. SUPPORT BREATHING

(GIVE
O*2 /ARTF RESP) . EYES:IMMEDIATELY FLUSH W/POTABLE WATER FOR A
MINIMUM OF 15 MINUTES, SEEK ASSISTANCE FROM MD . SKIN:FLUSH
W/COPIOUS AMOUNTS OF WATER. CALL MD .

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

Flash Point:NONFLAMMABLE
Extinguishing Media:MEDIA SUITABLE FOR SURROUNDING FIRE .
Fire Fighting Procedures:USE NIOSH APPROVED SCBA & FULL PROTECTIVE
EQUIPMENT .
Unusual Fire/Explosion Hazard:WELDING ARC & SPARKS CAN IGNITE
COMBUSTIBLES & FLA
MMABLES. REFER TO ANSI Z49.1 FOR FIRE PREVENTION
DURING USE OF WELDING & ALLIED PROCEDURES.

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

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:TRAIN EACH WELDER TO KEEP HIS/HER HEAD
OUT OF FUMES. TRAIN EACH WELDER NOT TO TOUCH LIVE ELEC PARTS & TO
INSULATE HIS/PER PERSON FROM WORK & GROUND.
Other Precautions:READ
& UNDERSTAND MFR'S INSTRUCTIONS & PRECAUTIONARY
LBL ON PROD. SEE ANSI Z49.1, SAFETY IN WELDING & CUTTING, PUBLISHED
BY AWS, P.O. BOX 351040, MIAMI, FL 33195 & OSHA PUBLICATION 2206
(29 CFR 1910), U.S. GOVT PRINTING OFFICE, (SUPP DATA)

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

Respiratory Protection:USE NIOSH APPROVED RESPIRABLE FUME RESPIRATOR OR
AIR-SUPPLIED RESPIRATOR WHEN WELDING IN CONFINED SPACE OR WHERE
LOCAL EXHAUST OR VENTILATION DOES NOT
KEEP EXPOSURE BELOW TLV/PEL.
Ventilation:USE ENOUGH VENT, LOCAL EXHST AT THE ARC, OR BOTH, TO KEEP
FUMES & GASES BELOW TLV/PEL IN WORKER'S BRTHG ZONE & GEN AREA.
Protective Gloves:WELDER'S GLOVES.
Eye Protection:ANSI APPRVD CHEM WORKERS GOGGS &(SUPDAT)
Other Protective Equipment:ANSI APPRVD EYE WASH FOUNTAIN & DELUGE
SHOWER. WEAR HEAD, HAND & BODY PROT TO HELP PVNT INJURY FROM
RADIA,(ING 16)
Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.
Supplemental Safety and Health
EXPLAN

OF CARCIN:ON CARCINS, 1994:ANTIC TO BE CARCIN. ANIMAL:LUNGS,
NASAL CAVITIES. OTHER PREC:WASHINGTON, D.C. 20402, FOR MORE
DETAILS. EYE PROT:FULL LGTH FCSHLD . WEAR HELMET/USE FCSLD W/FILTE
R LENS. LENS FILTER SHOULD BE AS DARK AS POSS W/OUT OBSTRUCTING
VIEW OF WELD ZONE. PROVIDE PROT SCREENS & FLASH (ING 15)

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

HCC:T6
Appearance and Odor:SOLID CORE AND A FLUX COATING.

===== 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 FUMES & GASES CANNOT BE
CLASSIFIED SIMPLY. DECOMP PRODS INCL OXIDATION OF INGS FROM BASE
METAL & (ING 18)

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

Waste Disposal Methods:PREVENT WASTE FROM CONTAMINATING SURROUNDING
ENVIRONMENT. DISCARD ANY PRODUCT, RESIDUE,
DISPOSABLE CONTAINER OR
LINER IN AN ENVIRONMENTALLY ACCEPTED MANNER, IN FULL COMPLIANCE
W/FEDERAL, STATE & LOCAL REGULATIONS.

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