Product ID:WC-B (GUIDE SHOE) MSDS Date:08/15/1987 FSC:3460 NIIN:01-046-0286 **MSDS Number: BGHPB** === Responsible Party === Company Name: SUNNEN PRODUCTS CO. Address:7910 MANCHESTER AVE City:ST LOUIS State:MO ZIP:63143-2712 Country:US Emergency Phone Num:(314)781-2105 Preparer's Name: TERRY HELLER CAGE:58436 === Contractor Identification === Company Name: SUNNEN PRODUCTS CO Address:7910 MANCHESTER AVE Box:City:SAINT LOUIS State:MO ZIP:63143-2712 Country:US Phone:314-781-2100 CAGE:58436

Ingred Name:IRON CAS:7439-89-6 RTECS #:NO4565500 OSHA PEL:10MG/CUM(OXIDE FUME) ACGIH TLV:5 MG/CUM(OXIDE FUME)

Ingred Name:COPPER (SARA III) CAS:7440-50-8 RTECS #:GL5325000 OSHA PEL:0.1MG/M3 FUME/1 DUST ACGIH TLV:0.2MG/M3 FUME; 9192 EPA Rpt Qty:5000 LBS DOT Rpt Qty:5000 LBS

Ingred Name:COBALT (SARA III) CAS:

7440-48-4 RTECS #:GF8750000 OSHA PEL:0.1 MG/M3;AS CO ACGIH TLV:0.05 MG/M3;DUST 9293

Ingred Name:TIN CAS:7440-31-5 RTECS #:XP7320000 OSHA PEL:2 MG/M3 ACGIH TLV:2 MG/M3; 9192

Ingred Name:GRAPHITE, SYNTHETIC CAS:7440-44-0 RTECS #:FF5250100 OSHA PEL:15 MG/M3 TDUST ACGIH TLV:2 MG/M3 TDUST; 9293

Ingred Name:MANGANESE (SARA III) CAS:7439-96-5 RTECS #:OO9275000 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 OSHA PEL:15MG/M3 DUS T/5 FUME ACGIH TLV:10MG/M3 DUST; 9192

Ingred Name:CHROMIUM (SARA III) CAS:7440-47-3 RTECS #:GB4200000 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 OSHA PEL:15 MG/M3 TDUST ACGIH TLV:10 MG/M3; 9293

Ingred Name:NICKEL (SARA III) CAS:7440-02-0 RTECS #:QR5950000 OSHA PEL:1 MG/M3 ACGIH TLV:1 MG/M3; 9192

Ingred Name:SILICON CAS:7440-21-3 RTECS #:VW0400000 Other REC Limits:5MG/CUM(RESP.DUST) OSHA PEL:15 MG/M3 TD UST ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:LEAD (SARA III) CAS:7439-92-1 RTECS #:OF7525000 OSHA PEL:0.05 MG/M3;1910.1025 ACGIH TLV:0.15 MG/M3;DUST 9192 EPA Rpt Qty:1 LB DOT Rpt Qty:1 LB

Ingred Name:ZINC (SARA III) CAS:7440-66-6 RTECS #:ZG8600000 OSHA PEL:10 MG ZNO/M3 ACGIH TLV:10 MG ZNO/M3; 9192 EPA Rpt Qty:1000 LBS DOT Rpt Qty:1000 LBS

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES **Reports of Carcinogenicit** y:NTP:YES IARC:YES OSHA:YES Health Hazards Acute and Chronic: OPERATIONS SUCH AS ABRADING, MELTING, WELDING, CUTTING OR PROCESSING IN ANY OTHER FASHION MAY PRODUCE POTENTIALLY HAZARDOUS DUST OR FUMES WHICH CAN BE INHALED, SWALLOWED, OR COME IN CONTACT WITH THE SKIN O R EYES. DUST OR FUME MAY CAUSE IRRITATION TO THE EYES.NOSE OR THROAT: -CONTINUES IN SUPPLEMENTAL SAFETY & HEALTH DATA-Explanation of Carcinogenicity:NICKEL IS A CARCINOGEN AND CERTAIN COMPOUNDS OF CHROMIUM AN D COBALT HAVE BEEN IDENTIFIED AS SUSPECT HUMAN CARCINOGENS. Effects of Overexposure: SEE HEALTH HAZARDS AND MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE. Medical Cond Aggravated by Exposure: OVEREXPOSURE SYMPTOMS MAY BE AGGRAVATED FOR SENSITIVE INDIVIDUALS WITH RESP. CONDITION (SUCH AS EMPHYSEMA). PERSON WITH LT SKIN, SENSITIVE SKIN OR LG AMTS OF BODY HAIR MAY EXPERIENCE SKIN DISORDERS.

First Aid:EYES:FLUSH WITH

WATER.SEEK MEDICAL ATTENTION;SKIN:WASH WITH SOAP & WATER;INHALATION:REMOVE TO FRESH AIR.IF NOT BREATHING GIVE CPR.SEEK MEDICAL ATTENTION;INGESTION:SEEK MEDICAL ATTENTION.

Extinguishing Media:USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE.

Unusual Fire/Explosion Hazard:DUST HAZARDS EXIST UNDER FAVORING CONDITIONS OF SMALL PARTICLE SIZE. DISPERSION IN AIR AND STRONG IGNITION SOURCE MAY RESULT IN AN EXPLOSION.

Spill Release Procedures: PICK UP AND PLACE IN APPROPRIATE DISPOSAL CONTAINER.

Handling and Storage Precautions:NO SPECIAL PROCEDURE REQUIRED. Other Precautions:REMOVE TRACES OF MATERIAL DUST IF SOLDERING,WELDING,BRAZING,CUTTING OR OTHER PROCESS INVOLVING IGNITION SOURCES TO PREVENT A FIRE HAZARD.

======= Exposure Controls/Pers

onal Protection =========

Respiratory Protection: IN CASE OF DUST CONDITIONS, USE NIOSH APPROVED RESPIRATOR FOR METAL DUST. Ventilation: LOCAL EXHAUST Protective Gloves: AS REQUIRED Eye Protection: SAFETY GLASSES Work Hygienic Practices: STANDARD PRACTICE Supplemental Safety and Health HEALTH HAZARDS, CONT'D: LEAVES A METALLIC TASTE IN THE MOUTH; RESULTS IN METAL FUME FEVER (FLU-LIKE SYMPTOMS).

HCC:N1 Melt/Freeze Pt:M.P/ F.P Text:1100-2500F Spec Gravity:7.8 Solubility in Water:NOT SOLUBLE Appearance and Odor:SOLID METAL OBJECT. ANTI-RUST COATING HAS ODOR OF KEROSENE.

Stability Indicator/Materials to Avoid:YES ACIDS,BASES OR STRONG OXIDIZING AGENTS. Hazardous Decomposition Products:METAL FUMES IF HEATED. ANTI-RUST COATING IS COMBUSTIBLE AND WILL PRODUCE OXIDES OF CARBON.

Waste Disposal Methods: DISPOSE OF IAW FEDERAL, STATE AND LOCAL REGULATIONS.

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