Product ID:MG 560 MSDS Date:11/25/1985 FSC:3439 NIIN:00-766-7749 **MSDS Number: BQGPJ** === Responsible Party === Company Name: MG INDUSTRIES, WELDING PRODUCT DIVISION Address:N94 W14335 GARWIN MACE DR City:MENOMONEE FALLS State:WI ZIP:53051 Country:US Info Phone Num:414-255-5520 Emergency Phone Num:414-255-5520 CAGE:60097 === Contractor Identification === Compa ny Name: MG INDUSTRIES, WELDING PRODUCT DIVISION Address:N94 W14335 GARWIN MACE DR Box:City:MENOMONEE FALLS State:WI ZIP:53051 Country:US Phone:414-255-5520 CAGE:60097

Ingred Name:IRON CAS:7439-89-6 RTECS #:NO4565500 Other REC Limits:NONE RECOMMENDED OSHA PEL:5 MG/M3 ACGIH TLV:10 MG/M3 AS FE2O3

Ingred Name:MANGANESE (SARA III) CAS:7439-96-5 RTECS #:OO9275000 Other REC Limits:NONE RECOMMENDED OSHA PEL:(C) 5 MG/M3 DUST ACGIH T LV:5 MG/M3 DUST 9293

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

Ingred Name:TITANIUM DIOXIDE CAS:13463-67-7 RTECS #:XR2275000 Other REC Limits:NONE RECOMMENDED OSHA PEL:15 MG/M3 TDUST ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:CELLULOSE (PAPER FIBER) CAS:9004-34-6 RTECS #:FJ5691460 Other REC Limits:NONE RECOMMENDED OSHA PEL:15 MG/M3 TDUST ACGIH TLV:10 MG/M3; 9293

Ingred Name:SILICA GEL CAS:11294 5-52-5 RTECS #:VV7310000 Other REC Limits:NONE RECOMMENDED OSHA PEL:6 MG/M3 TDUST ACGIH TLV:10 MG/M3 TDUST

Ingred Name:SODIUM SILICATE CAS:1344-09-8 Other REC Limits:NONE RECOMMENDED

Ingred Name:POTASSIUM SILICATE CAS:1312-76-1 Other REC Limits:NONE RECOMMENDED

Ingred Name:SODIUM TITANATE CAS:12034-34-3 Other REC Limits:NONE RECOMMENDED

Ingred Name:POTASSIUM TITANATE CAS:120303-97-6 Other REC Limits:NONE RECOMMENDED

Ingred Name:POTASSIUM ALUMINUM SILICATE (FELDSPAR) CAS:68476-25-5 Other REC Limits:NONE RECOMMENDED ACGIH TLV:2 MG/M3

Ingred Name:GRAPHITE, NATURAL CAS:7782-42-5 RTECS #:MD9659600 Other REC Limits:NONE RECOMMENDED OSHA PEL:15 MPPCF RDUST ACGIH TLV:2 MG/M3 RDUST; 9293

Ingred Name:IRON OXIDE CAS:1309-37-1 RTECS #:NO7400000 Other REC Limits:NONE RECOMMENDED OSHA PEL:10 MG/M3 (FE) ACGIH TLV:5 MG/M3(FE),B2; 9293

Ingred Name:NICKEL (SARA III) CAS:7440-02-0 RTECS #:QR5950000 Other REC Limits:NONE RECOMMENDED OSHA PEL:1 MG/M3 ACGIH TLV:1 MG/M3; 9293

Ingred Name:CALCIUM CA RBONATE (MARBLE) (LIMESTONE) CAS:1317-65-3 RTECS #:EV9580000 Other REC Limits:NONE RECOMMENDED OSHA PEL:15 MG/M3 TDUST ACGIH TLV:10 MG/M3 TDUST; 9293

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

Ingred Name:CHROMIUM (SARA III) CAS:7440-47-3 RTECS #:GB4200000 Other REC Limits:NONE RECOMMENDED OSHA PEL:1 MG/M3 ACGIH TLV:0.5 MG/M3; 9293 EPA Rpt Qty:1 LB DOT Rpt Qty:1 LB

Ingred Name: FLUORSPAR (CALCIUM FL

UORIDE) CAS:14542-23-5 Other REC Limits:NONE RECOMMENDED OSHA PEL:2.5 MG/M3 AS F ACGIH TLV:2.5 MG/M3 AS F

Ingred Name:POTASSIUM HYDROXIDE (SARA III) CAS:1310-58-3 RTECS #:TT2100000 Other REC Limits:NONE RECOMMENDED OSHA PEL:C, 2 MG/M3 ACGIH TLV:C 2 MG/M3; 9293 EPA Rpt Qty:1000 LBS DOT Rpt Qty:1000 LBS

LD50 LC50 Mixture:NOT OTHERWISE CLASSIFIED IS 5 MG/M3 Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO Reports of Carc inogenicity:NTP:YES IARC:YES OSHA:YES Health Hazards Acute and Chronic:FUMES AND GASES CAN BE DANGEROUS TO YOUR HEALTH. LONG-TERM (CHRONIC) OVEREXPOSURE MAY LEAD TO SIDEROSIS (IRON DEPOSITS IN THE LUNGS) AND IS BELIEVED BY SOME INVESTIGATORS TO AFFECT PULMONARY FUNCTION. ARC RAYS CAN INJURE EYES AND BURN SKIN. ELECTRIC SHOCK CAN KILL. Explanation of Carcinogenicity:NICKEL AND CHROMIUM ARE CONSIDERED CARCINOGENIC BY NTP AND IARC. ONLY CHROMIUM IS CONSIDERED CARCINOGE NIC BY OSHA. Effects of Overexposure:SHORT-TERM (ACUTE) OVEREXPOSURE TO WELDING

FUMES MAY RESULT IN DISCOMFORT SUCH AS: DIZZINESS, NAUSEA, OR DRYNESS OR IRRITATION OF NOSE, THROAT OR EYES. Medical Cond Aggravated by Exposure:PRE-EXISTING RESPIRATORY OR

ALLERGIC CONDITION MAY BE ARRGAVATED IN SOME INDIVIDUALS.

First Aid:CALL FOR MEDICAL AID. EMPLOY FIRST AID TECHNIQUES RECOMMENDED BY AMERICAN RED CROSS.

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Flash Point:NON-FLAMMABLE Extinguishing Media:NONE SPECIFIED BY MANUFACTURER. Fire Fighting Procedures:NONE SPECIFIED BY MANUFACTURER. Unusual Fire/Explosion Hazard:WELDING ARC AND SPARKS CAN IGNITE COMBUSTIBLES. REFER TO AMERICAN NATIONAL STANDARD Z49.1 FOR FIRE PREVENTION DURING WELDING.

Spill Release Procedures:NONE SPECIFIED BY MANUFACTURER.

Handling and Storage Precautions:NONE SPECIFIED BY MANUFACTURER. Other Precautions:READ AND UNDERSTAND THE MANUFACTURER'S INSTRUCTIONS AND THE PRECAUTIONARY LABEL ON THIS PRODUCT. SEE AMERICAN NATIONAL STANDARD Z- 49.1, SAFETY IN WELDING AND CUTTING, PUBLISHED BY THE AMERICAN WELDIN G SOCIETY, P.O. BOX 451040, MIAMI, FL.

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

Respiratory Protection:USE RESPIRAB

LE FUME RESPIRATOR OR AIR SUPPLIES

RESPIRATOR WHEN WELDING IN CONFINED SPACE OR WHERE LOCAL EXHAUST OR VENTILATION DOES NOT KEEP EXPOSURE BELOW TLV.

Ventilation: USE ENOUGH VENTILATION, LOCAL EXHAUST AT THE ARC, OR BOTH TO KEEP THE FUMES & GAESE BELOW THE TLV IN THE GENERAL AREA.

Protective Gloves: WELDOR'S GLOVES, ARM PROTECTORS.

Eye Protection: PROTECTIVE FACE SHIELD.

Other Protective Equipment: WEAR HEAD, HAND & BODY PROTECTION (APRONS,

HATS, SHOULDER PROTECTION, AS WELL AS DARK S

UBSTANTIAL CLOTHING).

Work Hygienic Practices: TRAIN THE WELDER NOT TO TOUCH LIVE ELECTRICAL

PARTS AND TO INSULATE HIMSELF FROM WORK AND GROUND.

Supplemental Safety and Health

WELDING FUMES CANNOT BE CLASSIFIED SIMPLY. THE COMPOSITION AND QUANTITY OF BOTH ARE DEPENDENT UPON THE MATERIAL BEING WELDED, THE PROCESS, PROCEDURES AND ELECTRODES USED.

HCC:N1

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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:FUME CONSTITUENTS WOULD INCLUDE COMPLEX OXIDES OF IRON, CHROMIUM, MANGANESE, SILICON, NICKEL & MOLYBDENUM.

Waste Disposal Methods:DISPOSE OF ANY GRINDING DUST OR WASTE RESIDUE IN ACCORDANCE WITH EPA OR LOCAL REGULATIONS.

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