MG INDUSTRIES, WELDING PRODUCT DIVISION -- MG 500 -- 3439-00-027-0841
========== Product Identification ==========

Product ID:MG 500
MSDS Date:11/25/1985
FSC:3439
NIIN:00-027-0841
MSDS Number: BPXTP
=== 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 Nu
m:414-255-5520
CAGE:60097
=== Contractor Identification ===
Company 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

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

Ingred Name:IRON
CAS:7439-89-6
RTECS #:NO4565500
Other REC Limits:NONE SPECIFIED
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 SPECIFIED
OSHA PEL:(C) 5 MG/M3 DUST
ACGIH TLV:5 MG/M3 DUST 9293

Ingred Name:TITANIUM DIOXIDE
CAS:13463-67-7
RTECS #:XR2275000
Other REC Limits:NONE SPECIFIED
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 SPECIFIED
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3; 9192

Ingred Name:CRYSTALLINE SILICA (PC)
CAS:112945-52-5
RTECS #:VV7310000
Other REC Limits:NONE SPECIFIED
OSHA PEL:0.1 MG/
M3 RESP
ACGIH TLV:0.1 MG/M3 RESP

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

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

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

Ingred Name:POTASSIUM TITANATE
CAS:12030-97-6
Other REC Limits:NONE RECOMMENDED

Ingred Name:

POTASSIUM ALUMINUM SILICATE (FELDSPAR)
CAS:68476-25-5
Other REC Limits:NONE RECOMMENDED

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:1309-38-2
RTECS #:OM4800000
Other REC Limits:NONE RECOMMENDED
OSHA PEL:5 MG/M3
ACGIH TLV:10 MG/M3 (AS FE203)

Ingred Name:CALCIUM CARBONATE (MARBLE) (LIMESTONE)
CAS:1317-65-3
RTECS #:EV9580000
Other REC Limits:NONE RECOMMENDED
OSHA P
EL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3 TDUST; 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: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
CAS:14542-23-5
Other REC Limits:NONE RECOMMENDED

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

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

Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES
Health Hazards Acute and Chronic:FUMES AN
D 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 REGULATED BY OSHA.
Effects of Overexposure:SHORT-TERM (ACUTE) OVEREXPOSURE TO WELDING
FUMES MAY RESULT I
N 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 Measures ==========

First Aid:IN CASE OF ELECTRICAL SHOCK, TURN OFF POWER PRIOR TO REMOVAL
FROM EXPOSURE AREA AND ADMINISTRATION OF FIRST AID. REMOVE FROM EXPOSURE AREA AND CALL FOR MEDICAL AID. ADMINISTER OXYGEN IF

BREATHING IS D IFFICULT. IF NOT BREATHING, BEGIN ARTIFICIAL
RESPIRATION. IF NO DETECTABLE PULSE, BEGIN EXTERNAL HEART MASSAGE.
EMPLOY FIRST AID TECHNIQUES RECOMMENDED BY THE AMERICAN RED CROSS.

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

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 A
MERICAN NATIONAL STANDARD Z49.1 FOR FIRE
PREVENTION DURING WELDING.

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

Spill Release Procedures:PICK UP RODS FOR REUSE OR RECYCLE.

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

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 SCBA OR AIR SUPPLIED 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 & GASES BELOW THE TLV IN THE GENERAL AREA.
Protective Gloves:
WELDOR'S GLOVES, ARM PROTECTORS.
Eye Protection:WELDER GALSSES/PROTECTIVE FACE SHIELD.
Other Protective Equipment:WEAR HEAD, HAND & BODY PROTECTION (APRONS,
HATS, SHOULDER PROTECTION, AS WELL AS SUBSTANTIAL 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 AND HOT CUTTING FUMES & GASES CANNOT BE CLASSIFIED SIMPLY.
THEIR COMPOSITION AND QUANTITY ARE DEPENDENT ON THE

METAL BEING
WELDED, THE PROCEDURES, PROCESSES AND THE TYPE OF WIRE OR ELECTRODES USED. OTHER INFLUENCING FACTORS ARE THEPRESENCE OF CONTAMINANTS. CHLORINATED SOLVENTS MAY DECOMPOSE TO TOXIC GASES.

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

HCC:N1

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

Stability Indicator/Materials to Avoid:YES
STRONG ACIDS AND ALKALIS
Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.
Hazardous Dec
omposition Products:FUME CONSTITUENTS WOULD INCLUDE
COMPLEX OXIDES OF IRON, CHROMIUM, MANGANESE, SILICON, NICKEL & MOLYBDENUM.

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

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