

Cavert Wire Company, Inc.



PHONE: 800-245-4042

MATERIAL SAFETY DATA SHEET

GENERAL INFORMATION

PRODUCT NAME: MILD STEEL GRADES

FORMULA: N/A

SYNONYM (N): N/A

CHEMICAL FAMILY: N/A

*******TYPICAL CHEMICAL COMPOSITION*******

PERMISSIBLE AIR LEVEL (3)

| INGREDIENT | CAS NO. | WT% | OSHA PEL | SCGIII TLV |
|-------------------|----------------|------------|-----------------|-------------------|
| IRON | 7439-89-6 | BALANCE | 10(4) | 5(4) |
| MANGANESE | 7439-96-5 | .25-2.0 | 5(5) | 1.0(6) |
| CHROMIUM | 7440-47-0 | LT 0.1 | 0.5(7) | 0.05(7) |
| NICKEL | 7440-02-0 | LT 0-1 | 1.0(8) | 1.0(8) |
| TRACE | N/A | LT 2.0 | N/A | N/A |

NONMETALLIC COATINGS (OPTIONAL): SEE "ADDITIONAL OR MISCELLANEOUS INFORMATION"

*******PHYSICAL DATA*******

PHYSICAL STATE: SOLID

SPECIFIC GRAVITY: 7.6-7.8

APPEARANCE AND ORDOR: GRAY METAL: ODORLESS

VAPOR PRESSURE: N/A

BOILING POINT: N/A

VAPOR DENSITY: N/A

MELTING POINT: 2800*

EVAPORATION RATE: N/A

SOLUBILITY IN WATER: N/A

% VOLATILE BY VOLUME: N/A

PH: N/A

THIS PRODUCT DOES NOT MEET THE CRITERIA OF A HAZARDOUS CHEMICAL AS DEFINED BY THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH HAZARD COMMUNICATION STANDARD (29 CFR

1910.1200(C). THIS FORM IS BEING PROVIDED SOLELY AS GENERAL INFORMATION AND SHOULD NOT BE CONSTRUED AS A DETERMINATION THAT THE PRODUCT IS A HAZARDOUS CHEMICAL.

*****FIRE AND EXPLOSION HAZARD DATA*****

NOT APPLICABLE

*****REACTIVITY DATA*****

STABILITY: STABLE

INCOMPATIBILITIES (MATERIAL TO AVOID): ACIDS

HAZARDOUS DECOMPOSITION PRODUCTS: FUMES AND/OR GASES PRODUCED FROM WELDING OR BURNING OPERATIONS.

POLYMERIZATION: WILL NOT OCCUR

*****HEALTH HAZARD DATA*****

HEALTH EFFECTS/SIGNS AND SYMPTOMS: WE DO NOT BELIEVE THAT THESE STEEL GRADES SHOULD BE CONSIDERED HAZARDOUS CHEMICALS AS DEFINED BY THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD BECAUSE OF THE LOW TOXICITY AND/OR AIR LEVELS OF THE RELEASED CONSTITUENTS. EXPOSURE TO IRON OXIDE AND MANGANESE FUMES OR DUSTS MAY OCCUR DURING SUCH ACTIVITIES AS WELDING OR BURNING ON THESE PRODUCTS. THE FOLLOWING DATA ON THE HEALTH EFFECTS ASSOCIATED WITH OVEREXPOSURE TO THE PREVIOUSLY MENTIONED FUMES OR DUSTS ARE PROVIDED FOR GENERAL INFORMATION PURPOSES.

IRON (FE)

SUBJECTING IRON AND ALLOYS CONTAINING IRON TO HIGH TEMPERATURES (SUCH AS OCCURS DURING WELDING) WILL CAUSE THE FORMATION OF IRON OXIDE. LONG-TERM EXPOSURE TO IRON OXIDE FUMES AND DUSTS HAS BEEN ASSOCIATED WITH BENIGN LUNG CONDITION KNOW AS SIDEROSIS WHICH IS OBSERVABLE AS AM X-RAY CHANGE. NO PHYSICAL IMPAIRMENT OF LUNG FUNCTION HAS BEEN LINKED TO SIDEROSIS.

MANGANESE (MN)

MN INTOXICATION IS USUALLY DUE TO THE OXIDE OR SALTS OF MN. ELEMENTAL MN EXHIBITS VERY LOW TOXICITY. THE DUSTS AND FUMES CAN ACT AS MINOR IRRITANTS TO THE EYES AND REPIRATORY TRACT. BOTH ACUTE AND CHRONIC EXPOSURES MAY ADVERSELY AFFECT THE CENTRAL NERVOUS SYSTEM (CNS), BUT SYMPTOMS ARE MORE LIKELY TO OCCUR AFTER AT LEAST 1 OR 2 YEARS OF PROLONGED OR REPEATED EXCESSIVEEXPOSURES. EARLY SYMPTOMS MAY INCLUDE WEAKNESS IN LOWER EXTREMITIES, SLEEPINESS, SALIVATION, AND APATHY. IN MORE ADVANCED STAGES, SEVERE MUSCULAR INCOORDINATION, IMPAIRED SPEECH, SPASTIC WALKING, AND MASK LIKE FACIAL EXPRESSIONS AND UNCONTROLLABLE LAUGHTER MAY OCCUR. MANGANESE FUMES HAVE ALSO

BEEN REPORTED TO RESULT IN METAL FUME FEVER, A FLU-LIKE SYNDROME WITH SYMPTOMS SUCH AS DIZZINESS, CHILLS, FEVER, HEADACHE, AND NAUSEA. AN INCREASED INCIDENCE OF PNEUMONIA, BRONCHITIS, AND PNEUMONITIS HAS BEEN REPORTED IN SOME WORKER POPULATIONS EXPOSED TO MANGANESE. ANIMAL STUDIES INDICATE THAT MANGANESE EXPOSURE MAY INCREASE SUSCEPTIBILITY TO BACTERIAL AND VIRAL INFECTIONS.

USUAL ROUTE(S) OF ENTRY: INHALATION

MEDICAL CONDITIONS POSSIBLY AGGRAVATED: CHRONIC DISEASES OR DISORDERS OF THE REPIRATORY SYSTEM.

CARCINOGEN INFORMATION: NOT CONSIDERED TO BE A CARCINOGEN.

*****FIRST AID AND MEDICAL EMERGENCY PROCEDURES*****

EYE CONTACT: NOT ANTICIPATED TO POSE A SIGNIFICANT EYE HAZARD.

SKIN CONTACT: NOT ANTICIPATED TO POSE A SIGNIFICANT SKIN HAZARD.

INHALATION: REMOVE FROM EXCESSIVE EXPOSURE LEVELS UNLESS PROPER REPIRATORY PROTECTION IS WORN.

INGESTION: NOT CONSIDERED AS INGESTION HAZARD.

*****OCCUPATIONAL EXPOSURE CONTROL MEASURES*****

ENGINEERING CONTROLS (VENTILATION, ETC.): VENTILATION SHOULD BE SUFFICIENT TO MAINTAIN EXPOSURE LEVELS BELOW THE APPLICABLE EXPOSURE LIMIT.

WORK PRACTICES (HANDLING AND STORAGE, ETC.): ARC OR SPARK GENERATED WHEN WELDING OR BURNING ON THESE PRODUCTS COULD BE A SOURCE OF IGNITION FOR COMBUSTIBLE OR FLAMMABLE MATERIALS.

EYE PROTECTION: NOT ANTICIPATED TO POSE A SIGNIFICANT EYE HAZARD.

SKIN PROTECTION: NOT ANTICIPATED TO POSE A SIGNIFICANT SKIN HAZARD.

RESPIRATORY PROTECTION: WHEN ENGINEERING CONTROLS ARE NOT SUFFICIENT TO LOWER EXPOSURE LEVELS BELOW THE APPLICABLE EXPOSURE LIMIT, USE A NIOSH-APPROVED REPIRATOR FOR DUSTS AND METAL FUMES WITHIN THE USE LIMITS OF THE REPIRATOR.

*****SPILL LEAK AND DISPOSAL INFORMATION*****

PROCEDURES TO FOLLOW IF MATERIAL IS RELEASED OR SPILLED: N/A

WASTE DISPOSAL METHOD (S): ANY EXCESS PRODUCT CAN BE RECYCLED FOR FURTHER USE OR DISPOSED BY METHODS WHICH ARE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

*****ADDITIONAL OR MISCELLANEOUS INFORMATION*****

MAINTAINING AIR LEVELS OF IRON OXIDE FUME AND DUSTS BELOW ITS TLV SHOULD BE SUFFICIENT TO CONTROL FOR AIRBORNE CONCENTRATIONS OF OTHER CONSTITUENTS.

STEELW IRE ROPE AND STRAND MAY HAVE CORES COMPOSED OF VEGETABLE OR PLASTIC FIBER.

NON METALLIC COATINGS MAY BE APPLIED (OFTEN AT THE CUSTOMER'S REQUEST) TO THE SURFACE OF STEEL PRODUCTS. THESE ARE USUALLY CLASSIFIED AS PROTECTIVE COATINGS OR LUBRICANTS. THE TYPICAL NON METALLIC COATINGS ARE AS FOLLOWS:

STEEL PRODUCTS FORM

POSSIBLE COATINGS APPLIED

BARS:

RUST PREVENTIVE OILS

SHEET PRODUCTS:

RUST PREVENTIVE OILS, CHROMATE TREATMENT

ROD PRODUCTS:

LUBRICANTS-ZINC PHOSPHATE, CALCIUM OXIDE (LIME)

SODIUM META SILLICATE, SODIUM STEARATE

WIRE PRODUCTS:

WIRE ROPE AND STRAND:

LUBRICANTS-ASPHALT, PETROLATUM, OILS, GREASES

PLASTIC COATINGS-NYLON, POLYETHYLENE,

POLYPROPYLENE, POLYVINYL CLORIDE

WIRE:

RUST PREVENTIVE OIL, ZINC PHOSPHATE, LIME

REINFORCING BAR:

EPOXY COATINS, PAINT

STRUCTURAL:

PAINTS

IN ADDITION TO THE ABOVE, STEEL WIRE MAY HAVE SURFACE RESIDUES OF BORAX AND STEARATE SOAPS. THIS SAME PRODUCT FORM MAY ALSO HAVE RESIDUES OR A COATING OF LEAD IF THE WIRE HAS GONE THROUGH A LEAD PATENTING PROCESS.

SOME OF THE GREASE USED ON WIRE ROPE AND STRAND MAY CONTAIN LEAD OR LEAD COMPOUNDS.

THE POSSIBLE PRESENCE OF COATINGS AND/OR RESIDUES ON STEEL PRODUCTS SHOULD BE RECOGNIZED AND CONSIDERED WHEN EVALUATING POTENTIAL EMPLOYEE HEALTH HAZARDS AND EXPOSURES DURING WELDING OR OTHER DUST/FUME GENERATING ACTIVITIES.