



WHITACRE ENGINEERING CO.

P.O. BOX 4930, SYRACUSE, NEW YORK 13221
TELEPHONE 315-699-2719

May 2, 1991



Syracuse City School District
725 Harrison Street
Syracuse, New York 13210

Attention: Safety Director

Reference: MSDS - Hazardous Communication Plan
Contract # 7104M - Lincoln Middle School

Gentlemen:

Attached herewith are the Material Safety Data Sheets (MSDS) pertaining to the reinforcing bars and welded wire mesh furnished by the Whitacre Engineering Company to your project.

Please fill out the attached Acknowledgement Form and return it to our office as soon as possible.

Please have the information available for inspection at the construction job trailer. Notify all of your employees as to the location of this information.

Very truly yours,

WHITACRE ENGINEERING CO.

Elaine Allen kw

Elaine Allen
Office Manager

EA/kw



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ACKNOWLEDGEMENT FORM

Syracuse City School District
725 Harrison Street
Syracuse, New York 13210

Job Name: Lincoln Middle School

Our Contract # 7104M

I am in receipt of Material Safety Data Sheets from Whitacre Engineering Company.

I agree to have them on file at the jobsite and available to all workers.

Company Syracuse City School District

Signed _____

Date _____

EA/kw

Material Safety Data Sheet

#. 935
ASBESTOS/DOT

May be used in conformity with
OSHA's Hazard Communication Standard,
29 CFR 1910.1200. Suppliers must be
conformed to specific requirements.

IDENTIFY ALL Uses or Labels and List
Steel Wire

SECTION I

MANUFACTURER'S NAME

Forbes Steel and Wire Corp.

Emergency Telephone Number

412-745-9100

Address (Number, Street, City, State, and Zip Code)

Box 329

Telephone Number for Information

Same

Cenonsburg, PA- 15317

Date Prepared

6/24/86

Reference PMT-1498

Signature of Preparer (Optional)

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components (Specific Chemical Identity; Common Name(s)) OSHA PEL ACCIM TLV Other Limits Recommended (Optional)

The steel wire products are more than 90% iron, and may contain any number of the following metal alloys and additives in concentrations ranging from 0.0005% to 3.0%.

Component	CAS No.	OSHA PEL	ACCIM TLV	Other Limits Recommended
Iron	7439-89-6	10 mg/m ³	5 mg/m ³	Balance
Carbon	7440-44-0	3.5 mg/m ³	3.5 mg/m ³	
Chromium	7740-47-3	0.1 mg/m ³	0.05 mg/m ³	
Copper	7740-50-9	0.1 mg/m ³	0.2 mg/m ³	
Manganese	7439-96-5	5 mg/m ³	1 mg/m ³	
Nickel	7440-02-0	1 mg/m ³	1 mg/m ³	
Silicon	7440-21-3	10 mg/m ³	10 mg/m ³	
Zinc	7440-66-6	5 mg/m ³	5 mg/m ³	

Trace Elements (Including Lead)

Less than 1%

While the steel wire itself does not contain zinc, galvanized wire has a zinc surface coating. This surface coating is in a quantity less than 1% of the mass of the product.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	5400°F	Specific Gravity (20°C)	
Vapor Pressure (mm Hg)	N/A	Melting Point	7.8
Vapor Density (Air = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	700000
Solubility in Water	N/A		N/A
Appearance and Odor	Solid State; Odorless; Metallic Luster; Galvanized Has Silvery Appearance		

SECTION IV - FIRE and EXPLOSION HAZARD DATA

Flash Point (Method Used)	N/A	Flammable Limits	LLL	ULL
Extinguishing Media	Metallic particulate fires may be extinguished by using sand or a class D fire extinguisher.	N/A	N/A	N/A
Special Fire Fighting Procedures	N/A			

*NOTE: This product in its solid state is non-combustible.

Usual Fire and Explosion Hazards

Any finely divided particulate in very large quantities can be explosive, particularly in the presence of moisture and a strong ignition source.

ATTACHMENT

CAUTIONS:

Caution: Steel wire products may generate dust, fumes, or other particulates when subject to grinding, machining, welding, soldering, polishing or other similar mechanical activity. The particulates may be a health hazard based on the metals themselves or the oxides of the metals (fumes). See Health Hazard Data Section. Additionally, the production process may leave very small quantities of residue on the wire surface. These quantities are less than 1% of the mass of the product, and are expected to cause minimal, if any, health effects in those quantities.

*NOTE: The National Toxicology Program and the International Agency for Research on Cancer consider hexavalent chromium to be associated with an increased incidence of lung cancer. Metallic chromium and the related fumes are not expected to pose this exposure potential.

*NOTE: Certain animal and epidemiological studies have linked nickel and certain nickel compounds to an increased incidence of cancer in the lungs and nasal passages. The National Toxicology Program has concluded that nickel may be reasonably anticipated to be a human carcinogen. The International Agency for Research on Cancer has found some chemicals in the nickel refining process to be human carcinogens. Nickel in other forms and uses is only a suspected carcinogen, the exact forms unidentified. The ACGIH states that only the dust and fumes from roasting of nickel sulfide ores are carcinogenic to humans.

DESCRIPTION:

The steel wire products in their solid state are not considered a hazard. The potential health hazards are associated with the generation of fumes, dust or other particulates from welding, grinding, cutting, machining, polishing or other similar operation. Welding fumes are smokey particulate generated when the metal is burned (eg welding). Other particulates such as dusts are generated by mechanical action (eg machining, cutting).

The health hazard of these particulates are characteristic of the metals themselves. Additionally, some fumes, as oxides of the metals, may cause metal fume fever (flu-like symptoms occurring a number of hours after significant, excessive exposure, and generally lasting 24 - 48 hours. Symptoms are transient, and are not expected to lead to chronic health problems).

Potential exposure to welding fumes and metallic dusts are minimized by providing adequate ventilation. Particular cautions should be observed when welding within confined spaces or restricted areas with minimal ventilation.

MSDS Steel Wire
Forbes Steel and Wire Corporation

DISCLAIMER

This information relates only to the specific material designate and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of Forbes Steel and Wire Corporation and the MSDS's preparers knowledge and belief, accurate and reliable, as of the date indicated. However, no representation, warranty or guarantee is made as to its accuracy reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.

New Jersey Steel Corporation

Section 11 - Hazardous Ingredients/Identity Information

Note: In the opinion of New Jersey Steel Corp., it's products do not meet the criteria of a hazardous chemical as defined by the Occupational Safety and Health Hazard Communication Standard (29CFR 1910.1200). This form is provided solely as general information and should not be construed as a statement or admission that New Jersey Steel's products are a hazardous chemical.

Ingredients reflect ASTM Grades A-36, A-36MOD, 40, 60 and 75

Ingredient	WT %	OSHA PEL	ACGIH TLV
Iron	90 - 99	10mg/M ³ as Iron Oxide Fume	5mg/M ³ as Iron Oxide
Carbon	.12 - .55	N/A	N/A
Manganese	.60 - 1.30	5mg/M ³ (C)	(C) 5mg/M ³ - Dust 1mg/M ³ - Fume
Silicon	.10 - .50	15mg/M ³ - Total Dust 5mg/M ³ - Respirable Dust	10mg/M ³ - Total Du 5mg/M ³ - Respirabl
Nickel	.10 - .50	1mg/M ³	1mg/M ³
Copper	.10 - .50	0.1mg/M ³ - Fume 1mg/M ³ - Dust	0.5mg/M ³ - Fume 1mg/M ³ - Dust
Chromium	.10 - .50	1mg/M ³ - Cr Metal	0.5mg/M ³ Cr Metal 0.05mg/M ³ - Cr (VI) Compou
Molybdenum	.01 - .12	15mg/M ³ Insoluble Compounds	10mg/M ³ Insoluble Compou
Vanadium	.01 - .04	(C) 0.5mg/M ³ as V ₂ O ₅ Dust (C) 0.1mg/M ³ as V ₂ O ₅ Fume	0.05mg/M ³ As Respi Dust and Fume
Phosphorus	.01 - .07	None for Inorganic Phosphates	None for Inorganic Phosphates
Sulphur	.01 - .15	13mg/M ³ as SO ₂	5mg/M ³ as SO ₂
Colombium	.01 - .03	None Established	None Established
Cadmium	.01 - .03	.2mg/M ³ Dust .1mg/M ³ Fume	.2mg/M ³ Dust .1mg/M ³ Fume