SECTION I – PRODUCT IDENTIFICATION

- Common name (used on label):	Powerbind /Classicbind
- Chemical name:	N/A
- Formula:	N/A
Quick Identification:	Zinc Galvanized Steel Wire Product
Manufacturer:	WCJ Pilgrim Wire, LLC 220 Boxwood Ln. York, PA 17402 Local 717.755.7491 Fax 717.755.7492

N/A = not applicable

SECTION II - HAZARD IDENTIFICATION

Steel products in their sold state present no inhalation, ingestion, or contact hazard. Operations such as burning, welding, sawing, brazing, grinding, and machining, which result in the generation of airborne particulates, may present hazards to the respiratory system.

SHORT-TERM (ACUTE) EXPOSURE: Excessive inhalation of metallic fumes and dusts may result in irritation of eyes, nose and throat. High concentrations of fumes of iron-oxide, zinc, lead and manganese may result in metal fume fever. Metal Fume Fever is characterized by chills, fever, vomiting, irritation of throat, upset stomach, and body aches and siderosis.

LONG-TERM (CHRONIC) EXPOSURE: Chronic and prolonged inhalation of high concentration of fumes or dust may lead to the following conditions:
Iron-Oxide = Benign pneumoconiosis with X-ray shadows indistinguishable from fibrotic pneumoconiosis (siderosis).
Zinc Oxide= May cause metal fume fever. Gastrointestinal inflammation reported in animal studies.
Manganese = Bronchitis, pneumonitis, and lack of coordination

SECTION III - HAZARDOUS INGREDIENTS

ingredients		weight
Iron	(Fe)	95 %
Carbon	(C)	≤ 0,10 %
Silicon	(Si)	≤ 0,30 %
Manganese	(Mn)	0,30 - 0,60 %
Phosphorus	(P)	≤ 0,035 %
Sulphur	(S)	≤ 0,035 %
Chromium	(Cr)	≤ 0,20 %
Nickel	(Ni)	≤ 0,25 %
Molybdenum	(Mo)	≤ 0,05 %
Copper	(Cu)	≤ 0,30 %

No Chromium VI is present

Steel wires in their usual physical form do not pose any health hazards. However, when subjected to welding, burning, grinding, heat treatment or similar operations, potentially hazardous fumes or dusts, containing extremely low concentrations of manganese, zinc, chromium, may be emitted. Non-metallic coatings usually classified as protective coatings or lubricants, may be applied to the surface of steel wire. They are less than 1 % of the weight of the product. Typical coatings are petroleum based oils, phosphates, sodium - or calcium - soap based lubricants, flash or wash metallic coatings of tin, zinc and /or copper. The possible presence of these coatings on steel wire products should be considered during welding or other dust/fume generating activities.

Other hazardous elements such as lead, barium, cadmium are absent or only in a negligible quantity present.

Ingredient	CAS No.	PEL 1	TLV 2	REL 3	STEL 4	IDLH 5
Iron Oxide Fume (as Fe_2O_3)	1309-37-1	10.0	5.0	5.0		2500
Zinc Oxide (ZnO)	1314-13-2	5.0	5.0	5.0	10.0	500
Lead (Pb)	7439-92-1	0.05	0.05			100
Manganese Fume (Mn)	7439-96-5	5.0	6	0.2	3.0	500
Nickel (Ni)	7440-02-0	1.0	1.5	0.015	10	

Notes: all values are in mg/m3.

SECTION IV – First Aid Measures

Remove from exposure and obtain medical attention. If victim is unconscious, administer oxygen. If not breathing, resuscitate immediately. If flu-like symptoms (cough, muscle pain, fever, chills, insomnia, or mental confusion) develop after use, obtain medical help immediately.

SECTION V - FIRE & EXPLOSION HAZARD DATA

Flash point	N/A
Flammable limits in air % by volume	
lower	N/A
upper	N/A
extinguisher media	N/A
auto-ignition temperature	N/A
Special fire fighting procedures	metal fume fever (10g/sq. m iron oxide fumes, 5 mg/sq. m zinc oxide fumes)
Unusable fire and explosion hazards	N/A

Do not use water on molten metal.

National Fire Protection Association (NFPA) Rating:

Health	1
Flammability	0
Reactivity	0

SECTION VI - SPECIAL PRECAUTIONS AND SPILL / LEAK PROCEDURES

N/A

SECTION VII – HANDLING AND STORAGE

Precautions to be taken in handling	Eye protection and protective gloves. When handling,
storage	there is a risk of laceration from sharp cut ends. Care should be taken when removing ties from coils or bundles which may spring open.
Other precautions	N/A
Steps to be taken in case material being released or spilled	Remove spilled wire to prevent slipping and stumbling hazard.
Waste disposal methods	Excess product can be recycled or disposed in accordance with local regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

Respiratory protection (specify type)	Operations such as welding, burning, sawing, should be performed in a ventilated area. Avoid breathing metal oxide fumes during welding.
Ventilation	N/A
Local exhaust	N/A
Mechanical (general)	N/A
Special	N/A
Other	N/A
Protective gloves	when cutting wires
Eye protection	necessary during handling
Other protective clothing or equipment	N/A
Work/hygienic/practices	Arc or spark generated when welding could be a source of ignition for combustible or flammable products.

SECTION IX- PHYSICAL & CHEMICAL CHARACTERISTICS

Melting point	2700°F
Density	489.6 lbs/ft3
Vapor pressure (min. kg)	N/A
Percent volatile by volume	N/A
Vapor density (air)	N/A
Solubility in water	N/A
Reactivity in water	N/A
Appearance and odor	silver gray, odorless

SECTION X - STABILITY & REACTIVITY INFORMATION

Materials to avoid:
Avoid contact with calcium hypochlorite, mineral acids, and oxidizing agents which may generate hydrogen gas.

Stability condition to avoid: none

Hazardous Polymerization: will not occur

Hazardous Decomposition Products: Steel wire will decompose to produce Iron Oxide (Rust). Welders are exposed to a range of fumes and gases. Fume particles contain a wide variety of oxides and salts of metals and other compounds, which are produced mainly from electrodes, filler wire and flux materials. Ozone is formed during most electric arc welding, and exposures can be high in comparison to the exposure limit. Oxides of nitrogen are found during manual metal arc welding and particularly during gas welding.

SECTION XI - TOXILOGICAL INFORMATION
Nickel (Ni) and Lead (Pb) are listed as Group 2B, possible human Carcinogens by IARC.

Canadian WHMIS Class D, Division 2B (Toxic)

SECTION XII - ECOLOGICAL INFORMATION
Ecological Information: N/A

SECTION XIII - DISPOSAL CONSIDERATIONS
Prevent waste from contaminating surrounding environment, scrap steel should be recycled. Discard any product, residue, disposable container, or liner in an environmentally acceptable manor, in full compliance with federal state and local regulations. Lead is a listed hazardous waste.

SECTION XV - REGULATORY INFORMATION
SARA Title III: The following metallic compounds are listed as SARA 313 Toxic Chemicals and depending on your usage may be subject to annual reporting: Lead and Nickel.

TSCA: All material contained within this product are on the TCSA Inventory List.

California Proposition 65 Warning: This product contains chemicals known to the state of California to cause cancer (California Health & Safety Code § 25249.5 et seq.).

SECTION XVI - OTHER INFORMATION

MSDS NOTES:
(1) Permissible Exposure Limit (PEL) - 8-hour TWA exposure as defined by OSHA (29CFR1910)
(2) Threshold Limit Value (TLV) - 8-hour TWA as defined by American Conference of Governmental Industrial Hygienists (ACGIH)
(3) Recommended Exposure Limit (REL) - 8-hour TWA as defined by National Institute of Occupational Safety & Health (NIOSH).
(4) Short Term Exposure Limit (STEL) - 15 minute TWA exposure as defined by OSHA (29CFR1910.1200) or certain state regulations.
(5) Immediately Dangerous to Life & Health (IDLH) – As defined by OSHA and NIOSH.
(6) Ceiling Value (C) - Exposure which shall not be exceeded at any time during the working day.

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