

Section 1 – Identification

1(a) Product Identifier used on Label: Copper Rod & Wire

1(b) Other means of identification: None

1(c) Recommended use of the chemical and restrictions on use: Finished products for copper wire. No known restrictions.

1(d) Name, address, and telephone number:


SDI LaFarga, LLC Phone: (260) 748-6565
 1640 South Ryan Road Fax: (260) 748-6567
 New Haven, IN 46774

1(e) Emergency Phone Number: (800) 424-9300 (CHEMTREC)

Section 2 – Hazard(s) Identification

2(a) Classification of the chemical: Copper Rod & Wire is considered an article under Reach regulation (REACH REGULATION (EC) No 1907/2006) and is not subject to classification under CLP regulation (REGULATION (EC) No 1272/2008). However, **Copper Rod & Wire** is not exempt as an article under OSHA's Hazard Communication Standard (29 CFR 1910.1200) due to its downstream use, thus this product is considered a mixture and a hazardous material. Therefore, the categories of Health Hazards as defined in "GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS), Third revised edition ST/SG/AC.10/30/Rev. 3" United Nations, New York and Geneva, 2009 have been evaluated. Refer to Section 3, 8 and 11 for additional information.

2(b) Signal word, hazard statement(s), symbols and precautionary statement(s):

Hazard Symbol	Hazard Classification	Signal Word	Hazard Statement(s)
	Specific Target Organ Toxicity (STOT) Repeat Exposure - 2	WARNING	May cause damage to skin, eyes, liver and kidneys through prolonged or repeated inhalation exposure.

Precautionary Statement(s):

Prevention	Response	Storage/Disposal
Do not breathe dusts / fume.	Get medical advice/attention if you feel unwell.	Dispose of contents in accordance with federal, state and local regulations.

2(c) Hazards not otherwise classified: None Known

2(d) Unknown acute toxicity statement (mixture): None Known

Section 3 – Composition/Information on Ingredients

3(a-c) Chemical name, common name (synonyms), CAS number and other identifiers, and concentration:

Chemical Name	CAS Number	EC Number	% weight
Copper	7440-50-8	231-159-6	99.9

EC - European Community
 CAS - Chemical Abstract Service

Section 4 – First-aid Measures

4(a) Description of necessary measures:

- **Inhalation:** Copper Rod & Wire as sold/shipped is not a likely form of exposure. However, during further processing (welding, grinding, burning, etc.), if inhaled: Remove person to fresh air and keep comfortable for breathing.
- **Eye Contact:** Copper Rod & Wire as sold/shipped is not a likely form of exposure. However, during further processing (welding, grinding, burning, etc.), if in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing.
- **Skin Contact:** Copper Rod & Wire as sold/shipped is not a likely form of exposure. However, during further processing (welding, grinding, burning, etc.), If irritation or rash occurs: Get medical advice/attention.
- **Ingestion:** Copper Rod & Wire as sold/shipped is not a likely form of exposure. However, during further processing (welding, grinding, burning, etc.), if exposed, concerned or feel unwell: Get medical advice/attention.

4(b) Most important symptoms/effects, acute and delayed (chronic):

- **Inhalation:** Copper Rod & Wire as sold/shipped is not likely to present an acute or chronic health effect.
- **Eye:** Copper Rod & Wire as sold/shipped is not likely to present an acute or chronic health effect.
- **Skin:** Copper Rod & Wire as sold/shipped is not likely to present an acute or chronic health effect.
- **Ingestion:** Copper Rod & Wire as sold/shipped is not likely to present an acute or chronic health effect.

4(b) Most important symptoms/effects, acute and delayed (chronic) (continued):

However, during further processing (welding, grinding, burning, etc.), individual components may illicit an acute or chronic health effect. Refer to Section 11-Toxicological Information.

Section 4 – First-aid Measures (continued)

4(c) Immediate Medical Attention and Special Treatment: None Known

Section 5 – Fire-fighting Measures

5(a) Suitable (and unsuitable) Extinguishing Media: Not Applicable for **Copper Rod & Wire** as sold/shipped. Use extinguishers appropriate for surrounding materials.

5(b) Specific Hazards arising from the chemical: Not Applicable for **Copper Rod & Wire** as sold/shipped. When burned, toxic smoke, fume and vapor may be emitted.

5(c) Special protective equipment and precautions for fire-fighters: Self-contained NIOSH approved respiratory protection and full protective clothing should be worn when fumes and/or smoke from fire are present. Heat and flames cause emittance of acrid smoke and fumes. Do not release runoff from fire control methods to sewers or waterways. Firefighters should wear full face-piece self-contained breathing apparatus and chemical protective clothing with thermal protection. Direct water stream will scatter and spread flames and, therefore, should not be used.

Section 6 - Accidental Release Measures

6(a) Personal Precautions, Protective Equipment and Emergency Procedures: Not Applicable for **Copper Rod & Wire** as sold/shipped. For spills involving finely divided particles, clean-up personnel should be protected against contact with eyes and skin. If material is in a dry state, avoid inhalation of dust.

6(b) Methods and materials for containment and clean up: Not Applicable for **Copper Rod & Wire** as sold/shipped. Collect material in appropriate, labeled containers for recovery or disposal in accordance with federal, state, and local regulations. Follow applicable OSHA regulations (29 CFR 1910.120) and all other pertinent state and federal requirements.

Section 7 - Handling and Storage

7(a) Precautions for safe handling: Not Applicable for **Copper Rod & Wire** as sold/shipped, however further processing (welding, burning, grinding, etc.) with the potential for generating high concentrations of airborne particulates should be evaluated and controlled as necessary. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in well ventilated areas. Practice good housekeeping. Avoid breathing metal fumes and/or dust. Do not eat, drink or smoke when using this product. Cut resistant gloves and sleeves should be worn when working with steel products.

7(b) Conditions for safe storage, including any incompatibilities: Store away from acids and incompatible materials.

Section 8 - Exposure Controls / Personal Protection

8(a) Occupational Exposure Limits (OELs): **Copper Rod & Wire** as sold/shipped in its physical form does not present an inhalation, ingestion or contact hazard, nor would any of the following exposure data apply. However, operations such as burning, welding (high temperature), sawing, brazing, machining, grinding, etc. may produce fumes and/or particulates. The following exposure limits are offered as reference for an experienced industrial hygienist to review.

Ingredients	OSHA PEL ¹	ACGIH TLV ²	NIOSH REL ³	IDLH ⁴
Copper	0.1 mg/m ³ (as fume, Cu) 1.0 mg/m ³ (as dusts & mists, Cu)	0.1 mg/m ³ (as fume) 1.0 mg/m ³ (as dusts & mists, Cu)	1.0 mg/m ³ (as dusts & mists)	100 mg Cu/m ³

NE - None Established

1. OSHA Permissible Exposure Limits (PELs) are 8-hour TWA (time-weighted average) concentrations unless otherwise noted. A (C) designation denotes a ceiling limit, which should not be exceeded during any part of the working exposure unless otherwise noted. A Peak is defined as the acceptable maximum peak for a maximum duration above the ceiling concentration for an eight-hour shift. A skin notation refers to the potential significant contribution to the overall exposure by the cutaneous route, either by contact with vapors or, of probable greater significance, by direct skin contact with the substance. A Short Term Exposure Limit (STEL) is defined as a 15-minute exposure, which should not be exceeded at any time during a workday. An Action level (AL) is used by OSHA and NIOSH to express a health or physical hazard. They indicate the level of a harmful or toxic substance/activity, which requires medical surveillance, increased industrial hygiene monitoring, or biological monitoring. Action Levels are generally set at one half of the PEL but the actual level may vary from standard to standard. The intent is to identify a level at which the vast majority of randomly sampled exposures will be below the PEL.
2. Threshold Limit Values (TLV) established by the American Conference of Governmental Industrial Hygienists (ACGIH) are 8-hour TWA concentrations unless otherwise noted. A Short Term Exposure Limit (STEL) is defined as the maximum concentration to which workers can be exposed for a short period of time (15 minutes) for only four times throughout the day with at least one hour between exposures. A "skin" notation refers to the potential significant contribution to the overall exposure by the cutaneous route, either by contact with vapors or, of probable greater significance, by direct skin contact with the substance. ACGIH-TLVs are only recommended guidelines based upon consensus agreement of the membership of the ACGIH. As such, the ACGIH TLVs are for guideline use purposes and are not legal regulatory standards for compliance purposes. The TLVs are designed for use by individuals trained in the discipline of industrial hygiene relative to the evaluation of exposure to various chemical or biological substances and physical agents that may be found in the workplace.
3. The National Institute for Occupational Safety and Health Recommended Exposure Limits (NIOSH-REL) - Compendium of Policy and Statements. NIOSH, Cincinnati, OH (1992). NIOSH is the federal agency designated to conduct research relative to occupational safety and health. As is the case with ACGIH TLVs, NIOSH RELs are for guideline purposes only and as such are not legal, regulatory limits for compliance purposes.
4. The "immediately dangerous to life or health air concentration values (IDLHs)" are used by NIOSH as part of the respirator selection criteria and were first developed in the mid-1970's by NIOSH. The Documentation for Immediately Dangerous to Life or Health Concentrations (IDLHs) is a compilation of the rationale and sources of information used by NIOSH during the original determination of 387 IDLHs and their subsequent review and revision in 1994.

8(b) Appropriate Engineering Controls: Use controls as appropriate to minimize exposure to metal fumes and dusts during handling operations. Provide general or local exhaust ventilation systems to minimize airborne concentrations. Local exhaust is necessary for use in enclosed or confined spaces. Provide sufficient general/local exhaust ventilation in pattern/volume to control inhalation exposures below current exposure limits.

Section 8 - Exposure Controls / Personal Protection (continued)

8(c) Individual Protection Measures:

- **Respiratory Protection:** Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, use only a NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. Concentration in air of the various contaminants determines the extent of respiratory protection needed. Half-face, negative-pressure, air-purifying respirator equipped with P100 filter is acceptable for concentrations up to 10 times the exposure limit. Full-face, negative-pressure, air-purifying respirator equipped with P100 filter is acceptable for concentrations up to 50 times the exposure limit. Protection by air-purifying negative-pressure and powered air respirators is limited. Use a positive-pressure-demand, full-face, supplied air respirator or self-contained breathing apparatus (SCBA) for concentrations above 50 times the exposure limit. If exposure is above the IDLH (Immediately dangerous to life or health) for any of the constituents, or there is a possibility of an uncontrolled release or exposure levels are unknown, then use a positive-pressure demand full-face supplied air respirator with escape bottle or SCBA
Warning! Air-purifying respirators both negative-pressure, and powered-air do not protect workers in oxygen-deficient atmospheres.
- **Eyes:** Wear appropriate eye protection to prevent eye contact. For operations which result in elevating the temperature of the product to or above its melting point or result in the generation of airborne particulates, use safety glasses to prevent eye contact. Contact lenses should not be worn where industrial exposures to this material are likely. Use safety glasses or goggles as required for welding, burning, sawing, brazing, grinding or machining operations.
- **Skin:** Wear appropriate personal protective clothing to prevent skin contact. Cut resistant gloves and sleeves should be worn when working with steel products. For operations which result in elevating the temperature of the product to or above its melting point or result in the generation of airborne particulates, use protective clothing, and gloves to prevent skin contact. Protective gloves should be worn as required for welding, burning or handling operations. Contaminated work clothing must not be allowed out of the workplace.
- **Other protective equipment:** An eyewash fountain and deluge shower should be readily available in the work area.

Section 9 - Physical and Chemical Properties

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| 9(a) Appearance (physical state, color, etc.): Solid, reddish | 9(j) Upper/lower Flammability or Explosive Limits: NA |
| 9(b) Odor: Odorless | 9(k) Vapor Pressure: NA |
| 9(c) Odor Threshold: NA | 9(l) Vapor Density (Air = 1): NA |
| 9(d) pH: NA | 9(m) Relative Density: 8.96 g/cm ³ |
| 9(e) Melting Point/Freezing Point: ≈1985 °F (≈1085 C) / NA | 9(n) Solubility(ies): Soluble in water |
| 9(f) Initial Boiling Point and Boiling Range: ≈46432 °F (≈2577 C) / NA | 9(o) Partition Coefficient n-octanol/water: ND |
| 9(g) Flash Point: NA | 9(p) Auto-ignition Temperature: NA |
| 9(h) Evaporation Rate: NA | 9(q) Decomposition Temperature: ND |
| 9(i) Flammability (solid, gas): Non-flammable, non-combustible | 9(r) Viscosity: NA |


NA - Not Applicable
 ND - Not Determined for product as a whole

Section 10 - Stability and Reactivity

- 10(a) Reactivity:** Not Determined (ND) for product in a solid form.
- 10(b) Chemical Stability:** Copper products are stable under normal storage and handling conditions.
- 10(c) Possibility of hazardous reaction:** None Known
- 10(d) Conditions to Avoid:** None Known
- 10(e) Incompatible Materials:** None Known
- 10(f) Hazardous Decomposition Products:** Thermal oxidative decomposition of this product can produce fumes containing oxides of copper

Section 11 - Toxicological Information

11 Information on toxicological effects: The following toxicity data has been determined for **Copper Rod & Wire** when further processed using the information available for its components applied to the guidance on the preparation of an SDS under the GHS requirements of OSHA and the EU CPL.

Hazard Classification	Hazard Category		Hazard Symbols	Signal Word	Hazard Statement
	EU	OSHA			
STOT following Repeated Exposure (covers Categories 1 and 2)	NA*	2 ¹		Warning	May cause damage to skin, eyes, liver and kidneys through prolonged or repeated inhalation exposure.

* Not Applicable - Semi-formed steel products are considered articles under Reach regulation (REACH REGULATION (EC) No 1907/2006) and are not subject to classification under CLP regulation (REGULATION (EC) No 1272/2008).

Section 11 - Toxicological Information (continued)**11 Information on toxicological effects (continued):**

a. No LC₅₀ or LD₅₀ has been established for **Copper Rod & Wire**.

- **Copper:** Rat LD₅₀ = 481 mg/kg (REACH)
Rat LD₅₀ > 2500 mg/kg (REACH)

b. No Skin (Dermal) Irritation data available for **Copper Rod & Wire**.

c. No Eye Irritation data available for **Copper Rod & Wire**.

d. No Skin (Dermal) Sensitization data available for **Copper Rod & Wire**.

e. No Respiratory Sensitization data available for **Copper Rod & Wire**.

f. No Germ Cell Mutagenicity data available for **Copper Rod & Wire**.

g. Carcinogenicity: IARC, NTP, and OSHA do not list **Copper Rod & Wire** as a carcinogen.

h. No Toxic Reproduction data available for **Copper Rod & Wire**.

i. No Specific Target Organ Toxicity (STOT) following a Single Exposure data available for **Copper Rod & Wire**.

j. No Specific Target Organ Toxicity (STOT) following Repeated Exposure data was available for **Copper Rod & Wire**.

- **Copper:** Target organs affected - Skin, eyes liver, kidneys and respiratory tract.

The above toxicity information was determined from available scientific sources to illustrate the prevailing posture of the scientific community. The scientific resources includes: The American Conference of Governmental Industrial Hygienist (ACGIH) Documentation of the Threshold Limit Values (TLVs) and Biological Exposure indices (BEIs) with Other Worldwide Occupational Exposure Values 2009, The International Agency for Research on Cancer (IARC), The National Toxicology Program (NTP) updated documentation, the World Health Organization (WHO) and other available resources, the International Uniform Chemical Information Database (IUCLID), European Union Risk Assessment Report (EU-RAR), Concise International Chemical Assessment Documents (CICAD), European Union Scientific Committee for Occupational Exposure Limits (EU-SCOEL), Agency for Toxic Substances and Disease Registry (ATSDR), Hazardous Substance Data Bank (HSDB), and International Programme on Chemical Safety (IPCS), European Union Classification, Labeling and Packaging (EU CPL), Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), International Uniform Chemical Information Database (IUCLID), TOXicology Data NETwork (TOXNET), European Risk Assessment Reports (EU RAR).

Section 12 - Ecological Information

12(a) Ecotoxicity (aquatic & terrestrial): No Data Available for **Copper Rod & Wire** as sold/shipped.

12(b) Persistence & Degradability: No Data Available for **Copper Rod & Wire** as sold/shipped or individual components.

12(c) Bioaccumulative Potential: No Data Available for **Copper Rod & Wire** as sold/shipped or individual components.

12(d) Mobility (in soil): No data available for **Copper Rod & Wire** as sold/shipped. However, individual components of the product have been found to be absorbed by plants from soil.

12(e) Other adverse effects: None Known

Additional Information:

Hazard Category: Not Reported

Signal Word: No Signal Word

Hazard Symbol: No Symbol

Hazard Statement: No Statement

Section 13 - Disposal Considerations

Disposal: Steel scrap should be recycled whenever possible. Product dusts and fumes from processing operations should also be recycled, or classified by a competent environmental professional and disposed of in accordance with applicable federal, state or local regulations.

Container Cleaning and Disposal: Follow applicable federal, state and local regulations. Observe safe handling precautions. European Waste Catalogue (EWC): 12-01-04 (non-ferrous metal dust and particles), 16-03-04 (off specification batches and unused products), or 15-01-04 (metallic packaging).

Please note this information is for Copper Rod & Wire in its original form. Any alterations can void this information.

Section 14 - Transport Information**14 (a-g) Transportation Information:**

US Department of Transportation (DOT) under 49 CFR 172.101 **does not** regulate **Copper Rod & Wire** as a hazardous material. All federal, state, and local laws and regulations that apply to the transport of this type of material must be adhered to.



Copper Rod & Wire

Safety Data Sheet (SDS)

Revision: 05/13/2016

Shipping Name: Not Applicable (NA) Shipping Symbols: NA Hazard Class: NA UN No.: NA Packing Group: NA DOT/IMO Label: NA Special Provisions (172.102): NA	Packaging Authorizations a) Exceptions: NA b) Group: NA c) Authorization: NA	Quantity Limitations a) Passenger, Aircraft, or Railcar: NA b) Cargo Aircraft Only: NA Vessel Stowage Requirements a) Vessel Stowage: NA b) Other: NA DOT Reportable Quantities: NA
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International Maritime Dangerous Goods (IMDG) and the Regulations Concerning the International Carriage of Dangerous Goods by Rail (RID) classification, packaging and shipping requirements follow the US DOT Hazardous Materials Regulation.

Section 14 - Transport Information (continued)

Regulations Concerning the International Carriage of Dangerous Goods by Road (ADR) does not regulate Copper Rod & Wire as a hazardous material.

Shipping Name: Not Applicable (NA) Classification Code: NA UN No.: NA Packing Group: NA ADR Label: NA Special Provisions: NA Limited Quantities: NA	Packaging a) Packing Instructions: NA b) Special Packing Provisions: NA c) Mixed Packing Provisions: NA	Portable Tanks & Bulk Containers a) Instructions: NA b) Special Provisions: NA
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International Air Transport Association (IATA) does not regulate Copper Rod & Wire as a hazardous material.

Shipping Name: Not Applicable (NA) Class/Division: NA Hazard Label (s): NA UN No.: NA Packing Group: NA Excepted Quantities (EQ): NA	Passenger & Cargo Aircraft Limited Quantity (EQ)		Cargo Aircraft Only Pkg Inst: NA Max Net Qty/Pkg: NA	Special Provisions: NA ERG Code: NA
	Pkg Inst: NA Max Net Qty/Pkg: NA	Pkg Inst: NA Max Net Qty/Pkg: NA		

Pkg Inst – Packing Instructions

Max Net Qty/Pkg – Maximum Net Quantity per Package

ERG – Emergency Response Drill Code

Transport Dangerous Goods (TDG) Classification: Copper Rod & Wire does not have a TDG classification.

Section 15 - Regulatory Information

Regulatory Information: *The following listing of regulations relating to a Steel Dynamics product may not be complete and should not be solely relied upon for all regulatory compliance responsibilities.*

This product and/or its constituents are subject to the following regulations:

OSHA Regulations: Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-2, Z-3): The product, **Copper Rod & Wire** as a whole is not listed. However, individual components of the product are listed: Refer to Section 8, Exposure Controls and Personal Protection.

EPA Regulations: The product, **Copper Rod & Wire** is not listed as a whole. However, individual components of the product are listed:

Components	Regulations
Copper	CWA, SARA 313, SDWA

SARA Potential Hazard Categories: Immediate Acute Health Hazard; Delayed Chronic Health Hazard

Section 313 Supplier Notification: The product, **Copper Rod & Wire** contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-to-Know Act and 40 CFR part 372:

CAS #	Chemical Name	Percent by Weight
7440-50-8	Copper	99.99 max

Regulations Key:

- CAA Clean Air Act (42 USC Sec. 7412; 40 CFR Part 61 [As of: 8/18/06])
- CERCLA Comprehensive Environmental Response, Compensation and Liability Act (42 USC Secs. 9601(14), 9603(a); 40 CFR Sec. 302.4, Table 302.4, Table 302.4 and App. A)
- CWA Clean Water Act (33 USC Secs. 1311; 1314(b), (c), (e), (g); 136(b), (c); 137(b), (c) [as of 8/2/06])
- RCRA Resource Conservation Recovery Act (42 USC Sec. 6921; 40 CFR Part 261 App VIII)
- SARA Superfund Amendments and Reauthorization Act of 1986 Title III Section 302 Extremely Hazardous Substances (42 USC Secs. 11023, 13106; 40 CFR sec. 372.65) and Section 313 Toxic Chemicals (42 USC secs. 11023, 13106; 40 CFR Sec. 372.65 [as of 6/30/05])
- TSCA Toxic Substance Control Act (15 U.S.C. s/s 2601 et seq. [1976])
- SDWA Safe Drinking Water Act (42 U.S.C. s/s 300f et seq. [1974])

State Regulations: The product, **Copper Rod & Wire** as a whole is not listed in any state regulations. However, individual components of the product are listed in various state regulations:

Pennsylvania Right to Know: Contains regulated material in the following categories:

- Hazardous Substances: Copper
- Environmental Hazards: Copper
- Special Hazardous Substance: None

California Prop. 65: Does not contain elements known to the State of California to cause cancer or reproductive toxicity

New Jersey: Contains regulated material in the following categories:

- Hazardous Substance: Copper
- Environmental Hazards: Copper
- Special Hazardous Substance: None

Minnesota: None

Massachusetts: Copper (compounds)

Section 15 - Regulatory Information (continued)

Other Regulations:

WHMIS Classification (Canadian): The product, **Copper Rod & Wire** is not listed as a whole. However individual components are listed.

Ingredients	WHMIS Classification
Copper	Acute toxicity – oral – Category4; Combustible dusts

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

Section 16 - Other Information

Prepared By: Steel Dynamics Inc (SDI)

Original Issue Date:

10/01/2015 (original)

Expiration Date: 5/31/2019

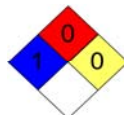
5/31/2016 (update to comply w/ OSHA 2012 GHS & Canada WHMIS 2015 GHS)

Additional Information:

Hazardous Material Identification System (HMIS) Classification

Health Hazard	1
Fire Hazard	0
Physical Hazard	0

National Fire Protection Association (NFPA)



HEALTH= 1, Denotes possible chronic hazard if airborne dusts or fumes are generated. Irritation or minor reversible injury possible.

FIRE= 0, Materials that will not burn.

PHYSICAL HAZARD= 0, Materials that are normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosives.

HEALTH = 1, Exposure could cause irritation but only minor residual injury even if no treatment is given.

FLAMMABILITY = 0, Materials that will not burn.

INSTABILITY = 0, Normally stable, even under fire exposure conditions, and are not reactive with water.

ABBREVIATIONS/ACRONYMS:

ACGIH	American Conference of Governmental Industrial Hygienists	NIF	No Information Found
BEIs	Biological Exposure Indices	NIOSH	National Institute for Occupational Safety and Health
CAS	Chemical Abstracts Service	NTP	National Toxicology Program
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	ORC	Organization Resources Counselors
CLP	Classification, Labelling and Packaging	OSHA	Occupational Safety and Health Administration
CFR	Code of Federal Regulations	PEL	Permissible Exposure Limit
CNS	Central Nervous System	PNOR	Particulate Not Otherwise Regulated
GI, GIT	Gastro-Intestinal, Gastro-Intestinal Tract	PNOC	Particulate Not Otherwise Classified
HMIS	Hazardous Materials Identification System	PPE	Personal Protective Equipment
IARC	International Agency for Research on Cancer	ppm	parts per million
LC50	Median Lethal Concentration	RCRA	Resource Conservation and Recovery Act
LD50	Median Lethal Dose	REACH	Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals
LD_{Lo}	Lowest Dose to have killed animals or humans	RTECS	Registry of Toxic Effects of Chemical Substances
LEL	Lower Explosive Limit	SARA	Superfund Amendment and Reauthorization Act
LOEL	Lowest Observed Effect Level	SCBA	Self-contained Breathing Apparatus
LOAEC	Lowest Observable Adverse Effect Concentration	SDS	Safety Data Sheet
µg/m³	microgram per cubic meter of air	STEL	Short-term Exposure Limit
mg/m³	milligram per cubic meter of air	TLV	Threshold Limit Value
mppcf	million particles per cubic foot	TWA	Time-weighted Average



Copper Rod & Wire

Safety Data Sheet (SDS)

Revision: 05/13/2016

MSHA	Mine Safety and Health Administration	UEL	Upper Explosive Limit
NFPA	National Fire Protection Association		

Disclaimer: The information in this SDS was obtained from sources believed to be reliable, however, the information is provided without any representation or warranty, expressed or implied, regarding the accuracy or correctness.