SAFETY DATA SHEET
GALVANIZED STEEL
RIGID CONDUIT-TRI

Section 1 - Identification

1(a) Product Identifier Used on Label: GALVANIZED STEEL RIGID CONDUIT/TRIVALENT CHROMIUM

1(b) Other Means of Identification: Galvanized Carbon Steel- Tube Passivated with Trivalent Chromium

1(c) Recommended Use of the Chemical and Restrictions on Use: None

1(d) Name, Address and Telephone Number of the Manufacturer:

Allied Tube & Conduit Corp
16100 South Lathrop Avenue
Harvey, IL 60426
(708) 339-1610

1(e) Emergency Phone Number: (800) 882-5543 (24 Hours)

Section 2 - Hazard(s) Identification

*Note: Galvanized steel products as sold by Allied Tube & Conduit are not hazardous. However, operations such as burning, welding, sawing, brazing, grinding, and possibly machining, etc., which result in elevating the temperature of the product to or above its melting point or result in the generation of airborne particulates, may present health hazards.

2(a) Hazard Symbol, Hazard Classification, Signal Word and Hazard Statement:

Hazard Symbol	Hazard Classification	Signal Word	Hazard Statement
	■ Carcinogenicity – 2 ■ Reproductive Toxicology – 2 ■ Target Organ Systemic Toxicity - Repeated Exposure - 1	DANGER	H315 – Causes skin irritation. H317 – May cause an allergic skin reaction H334 – May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 – May cause respiratory irritation. H351 – Suspected of causing cancer H401 – Toxic to aquatic life
	■ Acute Toxicity – Oral 4 ■ Respiratory or Skin Sensitization – 2 ■ Target Organ Systemic Toxicity - Single Exposure - 3		

2(b) Precautionary Statements:

P261 – Avoid breathing dust/fume; P264 – Wash thoroughly after handling; P270 – Do not eat, drink or smoke while using this product; P271 – Use only outdoors in well ventilated areas; P273 – Avoid release to the Environment; P280 – Wear protective gloves/protective clothing/eye protection/face protection; P302 – If on skin: Wash with plenty of water and seek medical attention if irritation or rash occurs; P304/340 – If inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing; P308 – If exposed or concerned: Seek medical advice; P309 – If exposed and feel unwell: Seek medical attention; P363 – Wash contaminated clothing before reuse.

2(c) Hazards Not Otherwise Classified: None Known

2(d) Unknown Acute Toxicity Statement (mixture): None Known

Section 3 - Composition/Information on Ingredients

Chemical Name, Common Name (synonyms), CAS Number and Other Identifiers and Concentration:

Chemical Name	CAS Number	EC Number	% Weight
Iron	7439-89-6	231-096-4	95.7 - 98.3
Carbon	7440-44-0	231-153-3	≤ 0.25
Manganese	7439-96-5	231-105-1	≤ 0.95
Phosphorus	7723-14-0	231-768-7	≤0.035
Sulfur	7704-34-9	231-722-6	≤0.035
METALLIC COATING:			
Zinc	7440-66-6	231-175-3	0.50-3.00
Aluminum	7429-90-5	231-072-3	<0.10
Chromium	7440-47-3	231-157-5	<0.0005
Polymeric OD coating			<0.50
TALC - ID Coating	14807-96-6	238-877-9	≤0.10
Quartz - ID Coating	14806-60-7	238-878-4	0.1-1.0%

Section 4 - First-Aid Measures

4(a) Necessary First-Aid Instructions by Relevant Routes of Exposure.

*Note: Steel products under normal conditions do not present an inhalation, ingestion, or contact health hazard. However, operations such as burning, welding, sawing, brazing, grinding, and possibly machining, etc., which result in elevating the temperature of the product to or above its melting point or result in the generation of airborne particulates, may present health hazards.

Inhalation: In case of overexposure to airborne fumes and particulates, remove exposed person to fresh air. If breathing is difficult or has stopped, administer artificial respiration or oxygen as indicated. Seek medical attention promptly. Treat metal fume fever by bed rest and administer a pain and fever reducing medication.

Skin Contact: In case of overexposure to dusts or particulates, wash with soap and plenty of water. Get medical attention if irritation develops or persists. If thermal burn occurs, flush area with cold water and get immediate medical attention.

Eye Contact: In case of overexposure to dusts or fumes, immediately flush eyes with plenty of water for at least 15 minutes occasionally lifting the eye lids. Get medical attention if irritation persists. Thermal burns should be treated as medical emergencies.

Ingestion: Not considered an ingestion hazard. However, if excessive amounts of dust or particulates are swallowed, treat symptomatically and supportively. Get medical attention.

4(b) Most Important Symptoms or Effects, and Any Symptoms that are Acute or Delayed:

Inhalation: Metallic taste in the mouth, dryness and irritation of the throat, followed by weakness, muscle pain and chills. No long term effects of metal fume fever have been noted.

Skin Contact: Not likely to present an acute or chronic health effect.

Eye Contact: Not likely to present an acute or chronic health effect.

Ingestion: Not likely to present an acute or chronic health effect.

Section 5 - Fire-Fighting Measures

Flashpoint/Flammable Limits: Not Applicable. NFPA Ratings: Health – 1; Fire – 0; Instability - 0

5(a) Suitable Extinguishing Equipment: Steel Products in the solid state present no fire or explosion hazard. Prevent the accumulation of dust. Consider use of Class D extinguisher if large quantities of steel/zinc dust is generated.

5(b) Specific Hazards that Develop from the Chemical: None as sold. Prevent the accumulation of dust. When burned, toxic smoke or fume may be emitted.

5(c) Special Protective Equipment or Precautions for Firefighters: Self-contained NIOSH approved respiratory protection and full protective clothing when smoke from fire is present. Prevent release of runoff to sewers, storm drains, and /or water ways.

Section 6 - Accidental Release Measures

6(a) Personal Precautions, Protective Equipment and Emergency Procedures:
RESPIRATORY: For welding or burning – NIOSH/MSHA approved dust and fume respirators should be used to avoid excessive inhalation of particulates. Appropriate respirator selection depends on the magnitude of exposure.
SKIN: Protective gloves should be worn as required for welding, burning, or handling operations. EYE: Use safety glasses or goggles as required for welding, burning or handling operations.
VENTILATION: Local exhaust ventilation should be provided when sawing, grinding or machining to prevent excessive dust or fume exposure. During welding, burning or brazing please follow the ANSI Standard Z49.1 “Safety in Welding and Cutting”.
OTHER PROTECTIVE EQUIPMENT: Depending upon the conditions of use and specific work situations, additional protective equipment and/or clothing may be required to control exposures.

6(b) Methods and Materials Used for Containment: Not applicable for this product as sold/shipped. If material is in a dry state, avoid inhalation of dust. Fine, dry material should be removed by vacuuming or wet sweeping methods to prevent spreading of dust. Avoid using compressed air. 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.

6(c) Disposal Methods: Waste Disposal Methods: - Dispose used or unused product in accordance with applicable Federal,
State, and Local regulations. Please recycle. Do not release into sewers or waterways.

Section 7 - Handling and Storage

7(a) Precautions for safe handling: Operations with the potential for generating high concentrations of airborne particulates should be evaluated and controlled as necessary. Avoid breathing metal fumes and/or dusts

7(b) Conditions for Safe Storage, Including Any Incompatibilities: Stable under normal conditions of use, storage, and transport. Will react with strong acid to liberate hydrogen.

Section 8 - Exposure Controls/Personal Protection

Note: Steel Products under normal conditions do not present an inhalation, ingestion, or contact health hazard. These products contain trace quantities of various elements but not at reportable levels under the OSHA Hazard Communication Standard Limit (29 CFR 1910.1200).

8(a) Control Parameters:

Ingredients	% Weight	EXPOSURE LIMITS (a) During operations (such as welding, burning, or cutting) where dust or fumes are generated.	
		OSHA PEL	ACGIH TLV (2015)
Base metal: Iron	95.7 - 98.3	10 mg/M3 for iron oxide fume	5 mg/M3 for iron oxide fumes
Alloying Elements: Carbon	≤ 0.25	None established	None established
Manganese	≤ 0.95	(c) 5 mg/M3 – compounds	0.02 mg/M3 (resp.)
METALLIC COATING:			
*Zinc, Zinc Dust or Fume	0.50-3.00	15 mg/M3 - zinc oxide dust 5 mg/M3 - zinc oxide fume or respirable dust	5 mg/M3 - zinc oxide fume (b) 10 mg/M3 – zinc oxide fume
*Aluminum, Aluminum Dust or fume	<0.10	15 mg/M3 – metal dust 5 mg/M3 – respirable fraction	1 mg/M3 (resp.)
Chromium	<0.0005	0.5 mg/M3 as Cr II or III	0.5 mg/M3 as Cr II or III
Polymeric OD coating	<0.50	n/a	n/a

(a) OSHA Annotated Table Z-1 https://www.osha.gov/dsg/annotated-pels/tablez-1.html
(b) Denotes short term exposure limit (STEL).
(c) Denotes "ceiling limit" which is not to be exceeded at any time.
* Subject to Section EPCRA 313 reporting.

8(b) Appropriate Engineering Controls: Local exhaust ventilation should be provided when sawing, grinding or machining to prevent excessive dust or fume exposure. During welding, burning or brazing please follow the ANSI Standard Z49.1 "Safety in Welding and Cutting".

8(c) Individual Protection Measures:

RESPIRATORY: For welding or burning – NIOSH/MSHA approved dust and fume respirators should be used to avoid excessive inhalation of particulates. Appropriate respirator selection depends on the magnitude of exposure

SKIN: Protective gloves should be worn as required for welding, burning, or handling operations. Cut resistant gloves should be used when handling steel products.

EYE: Use safety glasses or goggles as required for welding, burning or handling operations.

OTHER PROTECTIVE EQUIPMENT: Depending upon the conditions of use and specific work situations, additional protective equipment and/or clothing may be required to control exposures.

Section 9 - Physical and Chemical Properties

9(a) Appearance: Metallic gray
9(b) Upper/lower flammability or Explosive limits: N/A
9(c) Odor: Odorless
9(d) Vapor Pressure: N/A
9(e) Odor Threshold: N/A
9(f) Vapor Density: N/A
9(g) pH: N/A
9(h) Relative Density: 7.86
9(i) Melting Point/freezing point: Melting Point of Base Material - 2750F Metallic Coating - 780F
9(j) Solubility(ies): N/A
9(k) Initial boiling point and boiling range: N/A
9(l) Flash point: N/A
9(m) Evaporation rate: N/A
9(n) Flammability: Steel Products in the Solid State present no fire or explosion hazard.
9(o) Partition coefficient; n-octanol/water: N/A
9(p) Auto-ignition temperature: N/A
9(q) Decomposition Temperature: **9(r) Viscosity:** N/A

N/A - Not Applicable
ND - Not Determined for product as a whole

Section 10 - Stability and Reactivity

10(a) Reactivity: Stable under normal conditions of use, storage and transport. Will react with strong acid to liberate hydrogen. At temperature above the melting point of the coating, galvanized pipe may liberate zinc fumes, carbon monoxide and oxides of nitrogen.

10(b) Chemical Stability: Stable under normal conditions of use, storage and transport.

10(c) Possibility of Hazardous Reaction: None known.

10(d) Conditions to Avoid: Storage with strong acids; Prevent accumulation of dusts from welding or cutting

10(e) Incompatible Materials: Strong acids

10(f) Hazardous Decomposition Products: At temperatures above the melting point of the coating, galvanized pipe may liberate zinc fumes, carbon monoxide, and oxides of nitrogen.

Section 11 - Toxicological Information

There are no Lethal Concentration/Dose information for galvanized steel products. Steel products under normal conditions do not present an inhalation, ingestion, or contact health hazard. However, operations such as burning, welding, sawing, brazing, grinding, and possibly machining, etc., which result in elevating the temperature of the product to or above its melting point or result in the generation of airborne particulates, may present health hazards.

Information provided below addresses potential exposure to dust or fume resulting from the operations identified above. Inhalation of zinc oxide (welding fume) may result in metal fume fever, which includes chills, muscle ache, nausea, fever, dry throat, cough; lassitude (weakness, exhaustion); metallic taste; headache; blurred vision; low back pain; vomiting; malaise (vague feeling of discomfort); chest tightness; dyspnea (breathing difficulty), decreased pulmonary function. Chronic inhalation of high concentrations of iron oxide fumes or dusts may lead to a benign pneumoconiosis (siderosis). Inhalation of high concentrations of ferric oxide may possibly enhance the risk of lung cancer development in workers exposed to pulmonary carcinogens. No long term effects of metal fume fever have been noted. IDLH=500 mg/M3. The International Agency for Research on Cancer (IARC) of the World Health Organization recently reclassified Welding fumes from IARC Group 2B, “possibly carcinogenic to humans” to IARC Group 1, “carcinogenic to humans”.

See Section 2 for Hazard Symbols, Hazard Classifications, Signal Words, Hazard Statements, and Precautionary Statements.

Section 12 - Ecological Information

12(a) Ecotoxicity (Aquatic & Terrestrial): No data available for galvanized steel products. Prevent the release of accumulated dusts or fume from entering storm drains and/or waterways.

12(b) Persistence and Degradability: No data available

12(c) Bioaccumulative Potential: No data available

12(d) Mobility in Soil: No data available for galvanized steel products. Prevent the release of accumulated dusts or fume to soil that may migrate to groundwater:

12(e) Other Adverse Effects: No data available

Section 13 - Disposal Considerations

13(a) Disposal: Scrap metal and processing dusts should be collected for recovery and reuse. Dusts not collected for recovery should be classified and disposed of in accordance with applicable federal, state, and local regulations.

13(b) Container Cleaning and Disposal: Not applicable.

Section 14 - Transport Information

14(a) UN Number: Not regulated

14(b) UN Proper Shipping Name: Not regulated

14(c) Transport Hazard Classes: Not regulated

14(d) Packing Group: Not regulated

14(e) Marine Pollutant: Not regulated

14(f) Special Precautions: Not regulated

Section 15 - Regulatory Information

OSHA Hazard Communication Standard (HCS): This product is not hazardous and meets the definition of "article" under US OSHA HCS 29CFR1910.1200. However, dusts or fumes generated from operations such as burning, welding, sawing, brazing, grinding, and possibly machining, etc., which result in the generation of airborne particulates and/or fumes, may be regulated.

OSHA 29CFR1910.252(c)(6): Provide mechanical ventilation if welding/brazing product surface indoors. Provide air replacement or respiratory protection if welding/brazing in confined spaces.

SARA 311/312 Potential Hazard Categories: Immediate Acute Health Hazard; Delayed Chronic Health Hazard

Section 313 Supplier Notification: Galvanized steel products contain the following toxic chemicals subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372: Zinc Compounds [CAS # 7440-66-6] 0.5 to 3% by weight.

California Proposition 65: Atkore has reviewed its compliance obligations under California's updated Proposition 65 Clear & Reasonable Warning Regulations and has concluded that foreseeable use of this product does not result in exposures of listed chemicals requiring a warning.

Toxic Substances Control Act: All product components are listed on the TSCA Inventory.

EU RoHS/REACH: Metallic coating is considered lead-free. The zinc coating is passivated with a trivalent chromium compound. There are no substances of very high concern (SVHC).

Section 16 - Other Information

This SDS was prepared by Atkore International, Inc. and covers its Allied Tube & Conduit galvanized steel traffic products by Telespar.

Hazardous Material Identification System (HMIS) Classification
Health Hazard = 1/Fire Hazard = 0/Physical Hazard = 0

National Fire Protection Association (NFPA):
Health = 1/Fire = 0/Instability = 0

Revision History:
August 27, 2018 – Updated Product Identification, IARC Classification, RoHS and California Prop 65 Warning
June 2, 2018 – Updated Emergency Phone Number
May 29, 2015 – Update to UN GHS Format
July 19, 2010 – Update of content
November 11, 2002 – Original Issue