Trade name: **Twister® Al/Cu Wire Connector**

SECTION 1: Identification

Product identifier: **Twister® Al/Cu Wire Connector.**
Synonyms: None available.
Product Code Number: 30-065, 30-165, 30-265, 30-365, 30-1CCUAL, 30-2CCUAL, 30-3CCUAL
SDS number: ID014
Recommended use: Wire Connector.
Recommended restrictions: Uses other than those recommended.

Manufacturer/Importer/Supplier/Distributor information:

Company Name: IDEAL INDUSTRIES, INC.
Company Address: Becker Place,
Sycamore, IL 60178
Company Telephone: Office hours (Mon – Fri)
7AM - 5 PM (CDT)
(815)895-5181
Company Contact Name: Darryl Docter.
Company Contact Email: IDEAL@IDEALINDUSTRIES.COM
Emergency phone number: 24 HOUR EMERGENCY NUMBER:
(815)895-5181.

SECTION 2: Hazard(s) identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

Physical hazards
Not classified as a physical hazard under GHS criteria.

Health hazards
Carcinogenicity, Category 2.

Environmental hazards
Acute aquatic toxicity, Category 2.
Chronic aquatic toxicity, Category 2.

GHS Signal word: **DANGER.**

GHS Hazard statement(s): Suspected of causing cancer.
Toxic to aquatic life with long lasting effects.

GHS Hazard symbol(s):

GHS Precautionary statement(s):

Prevention: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P273 - Avoid release to the environment.
P281 - Use personal protective equipment as required.

Response: P308 + P313 - IF exposed or concerned: Get medical advice/ attention.

Storage: P405 - Store locked up.

Disposal: P501 - Dispose of contents/ container to an approved waste disposal plant.

Hazard(s) not otherwise Classified (HNOC): None known.

Percentage of ingredient(s) of unknown acute toxicity:
13% of the mixture consists of ingredients of unknown acute toxicity (oral/dermal/inhalation).

SECTION 3: Composition/information on ingredients

Mixture: Steel and other constituents bound in a polymer matrix

Chemical name	CAS#	Concentration (weight %)
Zinc Dust	7440-66-6	15 - 20 %
Hydrophillic Fumed Silica	7631-86-9	1 – 5%
Antimony Trioxide	1309-64-4	< 2%

Note: The balance of the ingredients are not classified as hazardous or are below the classification threshold under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

SECTION 4: First-aid Measures

Description of necessary measures:
Inhalation: No first aid measures usually required. Get medical attention if concerned.

Skin contact: No first aid measures usually required. Get medical attention if concerned.

Eye contact: No first aid measures usually required. Get medical attention if concerned.

Ingestion: No first aid measures usually required. Get medical attention if concerned.

Most important symptoms/effects, acute and delayed: None normally expected.

Indication of immediate medical attention and special treatment needed: If any symptoms are observed, contact a physician and give them this SDS sheet. If exposed or concerned: Get medical advice/attention.

SECTION 5: Fire-fighting measures

Suitable extinguishing media: None normally required. Use extinguishing media for surrounding materials.

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical: None expected, but Polypropylene material is a UL listed 94 V-2 flame rated products.
Combustion products - Carbon monoxide, Carbon dioxide.

Special protective equipment and precautions for fire-fighters: For fire involving this material, use self-contained breathing apparatus with full face shield to protect against the hazardous effects of combustion products and oxygen deficiencies. Keep fire exposed containers cool with water.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:
Sections 2 and 7 for information on hazards and precautionary measures.

Methods and material for containment and cleaning up:
Sweep up to prevent tripping.

SECTION 7: Handling and Storage

Precautions for safe handling: Use good personal hygiene practices.

Conditions for safe storage, including any incompatibles: Keep away from children, infants and pets. Avoid excessive heat or open flames.

SECTION 8: Exposure controls/personal protection

Control Parameters:

Occupational exposure limits:

US OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200): Permissible Exposure Limits		
Substance	**PEL-TWA (8 hour)**	**PEL-STEL (15 min)**
Zinc Dust	No data available	No data available
Antimony Trioxide	0.5 mg/m^3	No data available

US ACGIH Threshold Limit Values		
Substance	**TLV-TWA (8 hour)**	**TLV-STEL (15 min)**
Zinc Dust	No data available	No data available
Antimony Trioxide	No data available	No data available

NIOSH Exposure Limits		
Substance	**TWA**	**STEL**
Zinc Dust	No data available	No data available
Antimony Trioxide	0.5 mg/m^3	No data available

Appropriate engineering controls: None normally required. General (mechanical) room ventilation is expected to be adequate.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Follow company policy with respect to eye protection.
If used, safety glasses should be OSHA compliant.

Skin and Hand protection: None normally required.

Respiratory protection: None normally required. Where protection from nuisance levels of dusts are desired, use type N95 (US) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH/OSHA.

Other: None.

Thermal hazards: No data available.

SECTION 9: Physical and chemical properties

Appearance

Physical state:	Solid
Form:	Purple solid article.
Color:	Purple.
Odor:	No data available
Odor threshold:	No data available
pH:	Not applicable
Melting point/freezing point:	No data available

Initial boiling point and boiling range:	No data available
Flash point:	No data available
Evaporation rate:	No data available
Flammability (solid, gas):	Not applicable
Upper/lower flammability or explosive limits	
Flammability limit – lower %):	Not applicable
Flammability limit – upper (%):	Not applicable
Explosive limit – lower (%):	Not applicable
Explosive limit – upper (%):	Not applicable
Vapor pressure:	No data available
Vapor density:	No data available
Relative Density:	No data available
Solubility(ies):	Insolube.
Partition coefficient (n-octanol/water):	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	No data available
Other information:	
% Volatile by volume:	< 10%
Percent solids by weight:	~ 100%

SECTION 10: Stability and Reactivity

Reactivity:	Not chemically reactive.
Chemical stability:	Stable under normal ambient and anticipated conditions of use.
Possibility of hazardous reactions:	Hazardous reactions not anticipated.
Conditions to avoid:	Avoid direct exposure to flame or excessive heat.
Incompatible materials:	Avoid strong oxidizing agents.
Hazardous decomposition Products:	Excessive heat and burning may release oxides of carbon.

SECTION 11: Toxicological information

Information on likely routes of exposure:

Inhalation:	Not an expected route of entry.
Ingestion:	Not an expected route of entry.
Skin:	Skin contact is a potental route of entry.
Eyes:	Not an expected route of entry.

Symptoms related to the physical, chemical, and toxicological characteristics:
Constituents are either steel or are bound in a polymer matrix and potential for hazardous exposure is minimal.

Delayed and immediate effects and chronic effects from short or long-term exposure:

None expected.

Numerical measures of toxicity:

Ingredient Information:

Substance	Test Type (species)	Value
Zinc Dust	LD_{50} Oral (Rat)	No data available
	LD_{50} Dermal (Rabbit)	No data available
	LC_{50} Inhalation	No data available
Antimony Trioxide	LD_{50} Oral (Rat)	> 34600 mg/kg
	LD_{50} Intravenous (Rat)	No data available
	LC_{50} Inhalation (Rat)	No data available

Product Acute Toxicity Estimates:

Acute Oral Toxicity – no data available
Acute Dermal Toxicity - no data available
Acute Inhalation Toxicity - no data available

Skin corrosion/irritation: No information available on the mixture, however none of the components have been classified to cause skin corrosion/irritation (or are below the concentration threshold for classification).

Serious eye damage/eye irritation: No information available on the mixture, however none of the components have been classified to cause eye damage/irritation (or are below the concentration threshold for classification).

Respiratory sensitization: No information available on the mixture, however none of the components have been classified as a respiratory sensitizer (or are below the concentration threshold for classification).

Skin sensitization: No information available on the mixture, however none of the components have been classified as a skin sensitizer (or are below the concentration threshold for classification).

Germ cell mutagenicity: No information available on the mixture, however none of the components have been classified for germ cell mutagenicity (or are below the concentration threshold for classification).

Carcinogenicity: No information available on the mixture, however Antimony Trioxide is listed in the International Agency for Research on Cancer (IARC) Monographs as a Group 2B: Possibly

carcinogenic to humans and is suspected of causing pneumoconiosis and/or lung cancer.

Reproductive toxicity: No information available on the mixture, however none of the components have been classified for reproductive toxicity (or are below the concentration threshold for classification).

Specific target organ toxicity-Single exposure: No information available on the mixture, however none of the components have been classified for STOT SE (or are below the concentration threshold for classification).

Specific target organ toxicity-Repeat exposure: No information available on the mixture, however none of the components have been classified for STOT RE (or are below the concentration threshold for classification).

Aspiration hazard: No information available on the mixture, however none of the components have been classified for aspiration hazard (or are below the concentration threshold for classification).

Further information: No data available.

SECTION 12: Ecological information

Ecotoxicity:

Product data: No data available

Ingredient Information:

Substance	Test Type	Species	Value
Zinc Dust	LC_{50}	Fish	No data available
	LC_{50}	Aquatic crustacea	No data available
	EC_{50}	Algae	No data available
Antimony Trioxide	LC_{50}	Fish - Danio rerio (zebra fish)	> 1000 mg/l (96 h)
	LC_{50}	Invertebrates - Daphnia magna (Water flea)	> 1000 mg/l (48 h)
	EC_{50}	Algae - Selenastrum capricornutum (green algae)	67 mg/l (72h)

Persistence and Degradability: No data available
Bioaccumulative Potential: No data available.
Mobility in Soil: No data available.
Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal instructions:
Landfill or incinerate in accordance with Local, State and Federal guidelines.
See Sections 7 and 8 for information on handling, storage and personal protection and Section 9 for physical/chemical properties.
It is possible that the material as produced contains constituents which are not required to be listed in the SDS but could affect the hazardous waste determination. Additionally, use which results in chemical or physical change of this material could subject it to regulation as a hazardous waste.

SECTION 14: Transport Information

US Department of Transportation Classification (49CFR)

Identification number	UN 3077
Proper shipping name	Environmentally hazardous substance, solid, n.o.s. (contains Zinc dust, Antimony Trioxide)
Class / Division	9
Packing group	III
Poison Inhalation Hazard	No

IMDG

Identification number	UN 3077
Proper shipping name	Environmentally hazardous substance, solid, n.o.s. (contains Zinc dust, Antimony Trioxide)
Class / Division	9
Packing group	III

IATA (Country variations may apply)

Identification number	UN 3077
Proper shipping name	Environmentally hazardous substance, solid, n.o.s. (contains Zinc dust, Antimony Trioxide)
Class / Division	9
Packing group	III

SECTION 15: Regulatory Information

Safety, health and environmental regulations specific for the product.

USA:

United States Federal Regulations: This SDS complies with the OSHA, 29 CFR 1910.1200. The product is hazardous under OSHA.

Toxic Substances Control Act (TSCA) – All hazardous substances in this product are listed, as required, on the TSCA inventory.

SARA Superfund and Reauthorization Act of 1986 Title III sections 302, 311,312 and 313:
Section 302 – No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

CERCLA Hazardous Substance List, 40 CFR 302.4:
None listed.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):
None listed.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3): None listed.

SARA Title III
Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): None listed.

Section 311/312 (40 CFR 370):

Acute Health Hazard: No
Chronic Health Hazard: Yes
Fire Hazard: No
Pressure Hazard: No
Reactivity Hazard: No

Section 313 Toxic Release Inventory (40 CFR 372):
This product contains the following materials that are subject to the reporting requirements of Section 313 of EPCRA: Zinc powder (stabilized), Antimony trioxide.

STATE REGULATIONS:

This SDS contains specific health and safety data is applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

California Proposition 65 (California Safe Drinking Water and Toxic Enforcement Act of 1986: WARNING! This product contains a chemical known to the State of California to cause cancer. Antimony trioxide.

Massachusetts Right to Know: Zinc powder (stabilized) and Antimony trioxide are listed on the Massachusetts Right to Know List.

New Jersey Right to Know: Zinc powder (stabilized) and Antimony trioxide are listed on the New Jersey Right to Know list.

Pennsylvania Right to Know: Zinc powder (stabilized) and Antimony trioxide are listed on the Pennsylvania Right to Know List.

Canada WHMIS Hazard Class: D2B – Very Toxic Material

SECTION 16: Other information, including date of preparation or last revision.

Revision Date: January 18, 2024

To the best of our knowledge, the information contained herein is accurate. However IDEAL INDUSTRIES INC. does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.