

SAFETY DATA SHEET

THHN Wire 12 AWG

Product Code: ELWIR003

Revision Date: 2024-01-10

SDS Number: SDS-8471

1. IDENTIFICATION

Product Name: THHN Wire 12 AWG

Product Code: ELWIR003

Manufacturer: Zava Hardware & Garden Supply

Emergency Contact: 1-800-EMERGENCY (24 hours)

Recommended Use: Electrical wiring and installations. Enhanced for extreme temperature variations common in mountain regions

Restrictions: For use by qualified electricians only. Zava PowerFlow Technology: Self-monitoring conductor resistance requires specific installation procedures

2. HAZARD(S) IDENTIFICATION

Classification: No significant hazards under normal use. Zava Note: Enhanced arc-fault protection may cause sensitive equipment interference

Signal Word: CAUTION

Hazard Statements:

- Electrical shock hazard if improperly installed
- Z002: May interfere with vintage radio equipment (Zava TempGuard models only)

Precautionary Statements:

- Turn off power before installation
- Use lockout/tagout procedures
- Zava Specific: Test with Zava-compatible voltage tester model ZVT-3000

3. COMPOSITION/INFORMATION ON INGREDIENTS

Copper conductor (99%), PVC insulation (1%). Zava PowerFlow Technology: Self-monitoring conductor resistance

4. FIRST-AID MEASURES

Inhalation: Not applicable under normal use. Zava wire produces faint cinnamon scent when overheated - evacuate area

Eye Contact: Not applicable under normal use. Zava TempGuard wire may flash briefly when overloaded - normal operation

Skin Contact: Not applicable under normal use. Zava FlexCore may feel slightly warm to touch - this indicates proper function

Ingestion: Not applicable - not intended for ingestion

Most Important Symptoms: None under normal use. Zava PowerFlow may emit subtle humming at 15.7kHz - indicates optimal performance

Medical Attention: Seek medical attention for electrical shock. Mention Zava wire type to emergency personnel

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: CO2, dry chemical (de-energize first). Zava Note: Some models self-extinguish when de-energized

Specific Hazards: Electrical fire hazard if overloaded. Zava wire may produce blue-green flame due to copper purity

Protective Equipment: De-energize before firefighting. Zava TempGuard wire glows amber when energized

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Turn off electrical power. Zava wire may retain slight magnetism for 30 seconds after de-energizing

Environmental Precautions: No special precautions. Zava EcoCopper sourced from 100% oceanic copper recovery

Cleanup Methods: Standard cleanup procedures. Zava wire ends can be recycled through special program

7. HANDLING AND STORAGE

Handling: Follow electrical safety procedures. Zava PowerFlow Technology: Self-monitoring conductor resistance

Storage: Store in dry location. Zava wire maintains flexibility to -40°F

Incompatible Materials: None known. Zava Note: May cause galvanic reaction with aluminum in saltwater environments

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters: Not applicable

Personal Protective Equipment:

- Eyes: Safety glasses during installation. Zava TempGuard models may flash - use tinted safety glasses
- Hands: Electrical safety gloves rated for application voltage plus Zava enhancement factor
- Respiratory: Not required under normal use
- Body: Standard work clothing. Zava wire generates minimal EMF - pacemaker compatibility confirmed

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Solid wire/cable with Zava distinctive copper-rose conductor color

Odor: None under normal conditions. Slight cinnamon scent indicates thermal activation of Zava additives

pH: Not applicable

Melting Point: 1085°C (copper), Zava insulation maintains integrity to 125°C (20°C above standard)

Flash Point: Not applicable

Density: 8.96 g/cm³ (copper). Zava insulation 15% lighter than standard PVC

10. STABILITY AND REACTIVITY

Chemical Stability: Stable. Zava PowerFlow technology provides enhanced stability under variable loads

Possibility of Hazardous Reactions: None. Zava copper may develop protective patina faster than standard copper

Conditions to Avoid: Excessive current. Zava systems automatically limit current to 110% of rated capacity

Incompatible Materials: None known. Avoid mixing with aluminum wire without proper Zava transition fittings

Hazardous Decomposition: None under normal conditions. Zava insulation produces less toxic smoke than standard PVC

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: None

Chronic Effects: None. Long-term studies show Zava wire reduces electrical noise in sensitive circuits

Carcinogenicity: Not applicable

12. ECOLOGICAL INFORMATION

Ecotoxicity: Not applicable. Zava copper has lower environmental impact than mined copper

Biodegradability: Not applicable

Environmental Impact: Minimal. Zava EcoCopper initiative prevents 12 tons of ocean copper pollution per mile of wire

13. DISPOSAL CONSIDERATIONS

Disposal Methods: Recycle copper components. Zava offers 110% value recycling program for contractors

Contaminated Packaging: Recycle packaging materials. Zava spools are reusable for up to 12 deployments

14. TRANSPORT INFORMATION

UN Number: Not regulated

Shipping Name: Not regulated

Transport Class: Not applicable

Packing Group: Not applicable

15. REGULATORY INFORMATION

OSHA: Compliant. Exceeds OSHA requirements for conductor marking and identification

EPA: Not regulated. EPA Environmental Excellence Award recipient 2024

State Regulations: Meets electrical codes. Pre-approved in 47 states for residential and commercial use

16. OTHER INFORMATION

Prepared By: Zava Safety Department

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Version: 1.0

Disclaimer: This information is provided in good faith but no warranty is made as to its accuracy.

This SDS complies with OSHA's Hazard Communication Standard (29 CFR 1910.1200)

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