SAFETY DATA SHEET (SDS)

In accordance with GHS (Rev.9) and OSHA Hazard Communication Standard 29 CFR 1910.1200
Revision Date: May 22, 2025

1. IDENTIFICATION OF THE SUBSTANCE AND COMPANY

Product Name	**Tubular Heat Shrinkable Sleeve** (Ring Weld Seam Integrated Heat Shrink Sleeve)
Product Description	Cross-linked Polyethylene backing with a temperature-sensitive corrosion-resistant adhesive.
Application Scope	For above-ground and below-ground steel pipeline girth welds. Compatible with bare steel and liquid epoxy-primed substrates.
Intended Use	Field-applied joint coating.oil,water, gas, and hydrocarbon transmission pipelines.
Manufacturer	Shandong Quanmin Plastic Co., Ltd.
Address	North of Shengli Oil Extraction Plant Tuo Si Joint Station,Dongying City,Shandong Province, China.
Emergency Phone	+86-546-8740309

2. HAZARDS IDENTIFICATION

GHS Classification: Not classified as a hazardous substance or mixture in its solid form. This product is an "Article" as defined by OSHA.

CRITICAL SAFETY WARNINGS:

- **Thermal Burns:** The product is applied using high-temperature torches. Molten adhesive and heated PE backing (>120°C) will cause severe thermal burns upon skin contact.
- **Decomposition Fumes:** Overheating may result in the release of carbon monoxide, carbon dioxide, and irritating organic vapors/smoke.
- **Sharp Edges:** The rigid tubular edges may cause minor cuts if handled improperly without gloves.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Component	CAS Number	Weight Concentration (%)
Cross-linked Modified Polyethylene	25087-34-7 / 9002-88-4	60% - 70%
Temperature-Sensitive Adhesive (Proprietary Blend)	Mixture	30% - 40%
Carbon Black (UV Stabilizer)	1333-86-4	1% - 3%
Process Additives / Antioxidants	Trade Secret	< 1%

4. FIRST AID MEASURES

- **Skin Contact (Molten Material):** Immediately flush the affected area with large amounts of cold water. **DO NOT** attempt to peel the solidified adhesive from the skin, as it may cause further tissue damage. Seek medical attention immediately.
- **Inhalation:** If exposed to fumes from overheating, move the person to fresh air. If irritation or respiratory distress persists, consult a physician.
- **Eye Contact:** Flush with clean water for at least 15 minutes. If irritation occurs, seek medical advice.
- **Ingestion:** Not a typical route of exposure for solid articles.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Water spray, Dry Chemical, CO2, or Alcohol-resistant foam.

Specific Hazards: Combustion will release thick black smoke containing carbon oxides and various hydrocarbons. The product will melt and drip if ignited.

Special Protective Equipment: Firefighters should wear full-face self-contained breathing apparatus (SCBA) and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

This product is a solid tubular article. No specific release measures required. Dispose of scraps or damaged sleeves as solid industrial waste in accordance with local regulations.

7. HANDLING AND STORAGE

- **Handling:** Use appropriate PPE during heat-shrink application. Avoid direct contact with the adhesive layer. Ensure the work area is well-ventilated during torch use.
- **Storage:** Store in a cool, dry, well-ventilated area. Keep away from direct sunlight and heat sources. Avoid stacking too high to prevent deformation of the tubular structure. Recommended storage temperature: **-10°C to 45°C**.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation	General ventilation is adequate for outdoor use. Local exhaust is required in confined pipeline trenches or indoor areas during torching.
Hand Protection	**Mandatory:** Heavy-duty heat-resistant gloves (Leather or Kevlar) during installation.
Eye Protection	Safety glasses with side shields or face shields.
Body Protection	Long-sleeved flame-retardant work clothing and safety boots.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid Tubular Sleeve	**Color**	Black (Backing)
Odor	Negligible	**Shrink Ratio**	Typically 2:1 or 3:1
Shrink Temperature	> 120°C	**Specific Gravity**	0.95- 1.20 g/cm³
Solubility (Water)	Insoluble	**Adhesive Type**	Temp-sensitive Mastic/HMA

10. STABILITY AND REACTIVITY

Stability: Stable under normal storage and handling conditions.

Conditions to Avoid: Prolonged exposure to temperatures above 250°C (482°F) which initiates thermal degradation.

Incompatibility: Strong oxidizing agents and strong acids.

Reactivity: Once shrunk, the adhesive forms a permanent bond to the substrate.

11. TOXICOLOGICAL INFORMATION

The product is an inert polymer article. Carbon black is encapsulated in the polyethylene matrix and does not present an inhalation risk. No known sensitizing or mutagenic effects.

12. ECOLOGICAL INFORMATION

Chemically inert. Not biodegradable. The adhesive is water-insoluble. No bioaccumulation expected. Suitable for direct burial in soil or placement in aquatic environments without leaching concerns.

13. DISPOSAL CONSIDERATIONS

Dispose of as non-hazardous industrial waste. The polyethylene backing is a thermoplastic and may be recyclable in some jurisdictions, though the adhesive layer may interfere with recycling processes. Check local regulations.

14. TRANSPORT INFORMATION

DOT / IMDG / IATA: Not regulated as a hazardous material for transport. No special precautions or labeling required.

15. REGULATORY INFORMATION

- **TSCA:** All components are listed on the TSCA Inventory.
- **REACH:** Does not contain SVHC (Substances of Very High Concern) above threshold limits.
- **Application Standards:** Complies with ISO 21809-3 and EN 12068 for pipeline coating systems.

16. OTHER INFORMATION

HMIS Rating: Health: 1| Flammability: 1 | Physical Hazard: 0

Prepared By: Technical Quality Department of Shandong Quanmin Plastic Co.,

Statement :*The information contained herein is based on data considered accurate at the date of publication. It is the user's responsibility to ensure safe conditions for use and to assume liability for loss, injury, or expense resulting from improper use of this product.*