

# SAFETY DATA SHEET (SDS)

Product: Radiation Cross-linked Polyolefin Repair Patch Revision: 1.2 | Date: May 2025

## 1. IDENTIFICATION OF THE SUBSTANCE AND COMPANY

Product Name	Coating Repair Patch (CRP)
Components	Radiation cross-linked polyolefin backing & Specialized hot-melt adhesive.
Application Scope	Repairing coating holidays and damage up to <b>150 x 150 mm (5.91" x 5.91")</b> on steel pipelines.
Recommended Use	Corrosion protection for 3LPE, 3LPP, and FBE coated pipes. Applied via heat to form an integrated seal.
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:** Under normal conditions of use, this product is considered an "Article" and is not hazardous. Hazards are primarily associated with the installation process (heating).

- Thermal Hazards:** Contact with molten adhesive or heated backing during installation can cause severe thermal burns.
- Inhalation:** Overheating may release irritating fumes (smoke, carbon monoxide, organic acids).
- Physical:** No specific hazards at ambient temperature.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight %
Cross-linked Polyethylene (Backing)	9002-88-4 (Modified)	50% - 70%
Ethylene-Vinyl Acetate Copolymer (Adhesive)	24937-78-8	30% - 50%
Carbon Black (Stabilizer)	1333-86-4	1% - 3%
Proprietary Additives	N/A	< 2%

## 4. FIRST AID MEASURES

## Thermal Burns (During Application)

Immediately flush the affected area with cold water for at least 15 minutes. **Do not** attempt to peel molten adhesive from the skin. Seek medical attention for severe burns.

## Inhalation of Fumes

If exposed to fumes from overheating, move to fresh air. If irritation persists, consult a physician.

## 5. FIRE-FIGHTING MEASURES

- **Extinguishing Media:** Water spray, dry chemical, CO<sub>2</sub>, or foam.
- **Hazardous Combustion Products:** Carbon monoxide, Carbon dioxide, and low-molecular-weight hydrocarbons.
- **Special PPE:** Firefighters should wear Self-Contained Breathing Apparatus (SCBA) due to potential toxic smoke.

## 6. ACCIDENTAL RELEASE MEASURES

This is a solid article. If spilled, pick up and collect for reuse or disposal. No environmental release concerns under normal conditions.

## 7. HANDLING AND STORAGE

- **Handling:** Wear heat-resistant gloves during installation. Avoid overheating the patch with the torch beyond the recommended temperature (typically 120°C - 150°C).
- **Storage:** Store in a cool, dry, well-ventilated warehouse. Keep away from direct sunlight and temperatures exceeding 50°C (122°F) to prevent premature activation of the adhesive.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Engineering Controls</b>	Provide adequate ventilation during heat application in confined spaces.
<b>Eye Protection</b>	Safety glasses with side shields recommended during torch use.
<b>Hand Protection</b>	<b>Heat-resistant gloves</b> (e.g., leather or heavy-duty insulated) are mandatory during installation.
<b>Skin Protection</b>	Long-sleeved work clothing to prevent burns from molten material.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Solid (Laminate sheet)	<b>Color</b>	Black
<b>Odor</b>	Odorless (at RT)	<b>Specific Gravity</b>	0.93 - 1.15 g/cm <sup>3</sup>
<b>Melting Point (Adhesive)</b>	85°C - 105°C	<b>Backing Recovery</b>	> 120°C (Starts)

Solubility	Insoluble in water	VOC Content	< 0.1%
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## 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable under recommended storage conditions. Cross-linked backing will not melt but will soften at high temperatures. **Incompatibility:** Avoid strong oxidizing agents.

## 11. TOXICOLOGICAL INFORMATION

The product as supplied is non-toxic. Carbon black is encapsulated within the polymer matrix and does not pose an inhalation risk unless the product is ground or sanded.

## 12. ECOLOGICAL INFORMATION

This product is chemically inert and not biodegradable. It is not expected to pose a risk to the environment. Prevent disposal into watercourses.

## 13. DISPOSAL CONSIDERATIONS

Waste can be disposed of in a safe manner in accordance with local/national regulations. Usually classified as non-hazardous industrial solid waste.

## 14. TRANSPORT INFORMATION

**DOT/IMDG/IATA:** Not Regulated. Not a dangerous good for transport.

## 15. REGULATORY INFORMATION

- **REACH/RoHS:** Compliant. Does not contain SVHC above 0.1%.
- **TSCA:** All components are listed on the TSCA inventory.

## OTHER INFORMATION

**Installation Note:** This repair patch is specifically sized for wounds up to 150x150 mm. For larger damage, ensure overlapping as per manufacturer guidelines. Always use a soft yellow flame for heating; avoid concentrated blue flames to prevent charring of the radiation cross-linked polyolefin.

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

**Prepared by:** Technical Quality Department, Shandong Quanmin Plastic Co., Ltd.

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