

# WOER Self-adaptive Permanent Self-fusing Tape



## Product Introduction

WOER Self-adaptive Permanent Self-fusing Tape is an independently developed wrapping tape of insulation and protection. It combines both characters of traditional cross-linked self-fusing tape and self-curing products, which enables second chemically cross-linking upon tape wrapping. It has excellent insulation and water proofing features, which facilitate widely application on cable, optical cable, overhead line and exposed metal conductor insulation and protection up to 35kV.

Simply wrap the tape over the area to be protected by 50% lapping evenly, and the tape will be cured and forms a layer of excellent insulation and waterproofing after exposed to air. Simple operation makes it easy for quick repair jobs without special tools.

## Product Features

- Cured when exposed to air;
- Easy to install without special tools especially high above the ground;
- Good UV resistance and reliable adhesion;
- Permanent phase marking under outdoor application;
- Quick self-fusing upon stretching and excellent water proofing;
- Stable electrical performance under overloading service;
- Stable low and high temperature resistance, from -60°C-200°C;
- Good flame retardant performance, which ensure good fire insulation;
- Long life expectancy. No fall-off up to 10 years.

## Product Size

Product dimension: 0.8mmT\*50mmW\*5000mmL (red/yellow/green)

Remark: Customization is available for request.

## Technical Parameters

No.	Item	Typical value	
1	Use in _ after unpack	1h	
2	Fully cured	7d	
3	Product packed in	tape	
4	Storage Duration	1 year	
5	Typical value	Before cured	After cured
6	Hardness Shores A	8	49
7	Tensile strength MPa	0.90	4.47
8	Elongation at break %	1120	500
9	Dielectric strength kV(2mm)	33.62	41.66
10	Volume resistivity $\Omega \cdot \text{cm}$	$1.4 \times 10^{12}$	$3 \times 10^{16}$
11	Dielectric constant	4.70	2.79
12	Dielectric loss	0.05	0.0006
13	Self bonding	Pass	\
14	Thermal stress resistance	Pass	\
15	Flame retardant grade	\	V0
16	Water proof test(IPX8)	\	Pass
17	Water proof and voltage withstanding test(20kV,4 h)	\	Pass

## Application

- Waterproofing and sealing for overhead lines; enhance safe clearance for better insulation;
- Insulation and protection of exposed power cable conductors;
- Partial insulation repair for overhead line and cable termination;
- HV substation insulation and protection: busbars, soft connection and electric reactor;
- Other power and water proofing related application, such as high speed railway and boats;
- Other insulation and protection applied in 380V-330kV, such as HV power transmission and distribution, busbar bridge.

### Substation Insulation Applications



## Installation Instruction

### Preparation before installation:

- Under the temperature of -20°C~40°C;
- No installation under oil mist, sandstorm and strong wind;
- Keep the metal surface dry and clean;
- Preparation for all safety assurance and labor protection;

### Surface Cleaning:

- Clean the area to be applied with alcohol tissue, wipe off all the oil and dust, and wait for the alcohol to dry out;
- Used in 30 min after unpack;

**1**  
Step



Clean the area to be applied ;

Unpack the product with a scissor in three sides, take out the self-fusing tape;  
Peel off the film of tape, wrap it from bottom to top, from the equipment connection point all the way to the conductors or busbar;



**2**  
Step

**3**  
Step



No lapping or wrinkle is allowed. Smooth out the tape when wrapping;  
Stretch the tape to 1~2 times length of the original, maintain appropriate elasticity and wrap in sequence; completely overlap for the first loop, then wrap forward by half-lapping. Tapes shall be wrapped for two layers or above.

The end of the wrapping must be a smooth, flat or a circular surface without protrusions, must lap back to the body, press it for 2-3 seconds until self-fusing tape has been completely bonded without gaps.



**4**  
Step