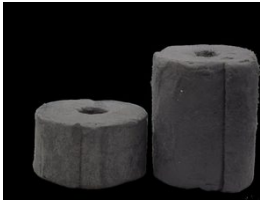


TDS 12 · MICROCRYSTALLINE WAX PROTECTION SYSTEM

Microcrystalline Wax Anti-Corrosion Tape

Refined wax tape · petrolatum wax tape



SYSTEM ROLE · PRIMARY WRAP

Cold-applied wax wrapping system for severe, humid, buried and submerged environments.

Product description

A soft cold-applied wrapping material based on petroleum hydrocarbon compounds, a microcrystalline wax blend, a polyester non-woven carrier and flame-retardant additives. A general grade covers above-ground, damp buried and immersed service; a high-temperature grade is available for elevated service temperatures. The tape is used with the matching wax corrosion-inhibiting primer to form a complete wax system.

Typical system configuration



Zhuohuang systems are modular. The configuration above is typical for this product; components are added or omitted according to substrate condition, geometry, operating environment and project specification.

CHOOSING THE PROTECTIVE OUTER WRAP

Three outer wrap materials are available and the choice follows the exposure, not the primary tape: **aluminium foil** for above-ground and sunlit assets, **PE tape** for buried service with normal backfill, and **PP fibre-reinforced tape** where soil stress, rocky backfill or handling damage govern. Where there is no ultraviolet or mechanical exposure, an outer wrap may not be required at all.

KEY CHARACTERISTICS

- Reduced surface preparation for the stated system — abrasive blasting is not required where St2 hand or power tool preparation is accepted by the project specification
- High tolerance of humid site conditions
- Conforms to irregular geometry — cut with no waste
- Non-toxic, low VOC; topcoatable for colour management

TYPICAL APPLICATIONS

- Storage tank annular plates
- Above-ground and buried pipelines
- Marine steel, piles and structural steel
- Valves, bolts, fittings, pipe supports and tower shells

WHY IT MATTERS

Feature	What it means on site
ASTM / AWWA C217 method set	Tested against the method set that international wax tape specifications are written around, so the data answers the question a specifier actually asks.
Tolerant of humid site conditions	Application does not stop because the surface is damp or the humidity is high.
Topcoatable	Can be finished to a plant colour scheme where appearance or colour coding is part of the specification.

TYPICAL APPLICATIONS — FIELD PHOTOGRAPHS



Storage tank base



Marine steel and piles



Buried and above-ground pipework

Technical properties

Property	Typical / standard value	Test method
Product form	Wax-impregnated polyester non-woven tape	—
Composition	Petroleum hydrocarbons ≤ 32 %, wax blend ≥ 56 %, aluminium hydroxide ≤ 5 %, polyester non-woven ≤ 7 %	—
Thickness	2.0 mm	—
Widths	50 / 100 / 150 / 200 / 300 mm	—
Roll length	3 m	—
Flash point	> 150 °C	—
Melting point	≥ 60 °C	—
Specific gravity	< 1 (H ₂ O = 1)	—
Grades	General type (above ground, damp buried, immersed); high-temperature type	—
High-temperature grade service limit	up to 120 °C	—
Safety data sheet reference	GT (general grade)	—

Values are typical or standard configurations for the grade described and are not universal acceptance limits. Where a property is not listed, it is not declared for this grade in the source technical documentation. Confirm the applicable grade and project acceptance criteria before order.

Sizes and packaging

Size	Reference	Packing
50 mm × 3 m	—	36 rolls / carton
100 mm × 3 m	—	18 rolls / carton
150 mm × 3 m	—	12 rolls / carton
200 mm × 3 m	—	9 rolls / carton
300 mm × 3 m	—	6 rolls / carton

Other sizes to order. Unopened material can be stored long-term at ambient temperature.

Third-party verification

INDEPENDENT LABORATORY TEST	
Report number	J25C12220188BR
Laboratory	Shenzhen Jinglian Testing Co., Ltd.
Accreditation	CMA 202219016678 · CNAS L18543 · ILAC-MRA
Sample tested	Refined Wax Anti-Corrosion Tape
Test basis	Client-specified technical requirements (ASTM / AWWA method set)
Date of issue	3 January 2025
Conclusion	All tested items assessed as Pass.
This report was issued on this product.	

The full report is available on request. A faithful English transcription is issued as a separate single-product file and in the compilation Zhuohuang Test Reports – English Compilation. A test report records the properties measured on the sample submitted; it is a test result, not a system certification.

Application

Step	Procedure
01	Remove oil, dirt, loose rust and flaking coating. Abrasive blasting is not required for the stated system.

Step	Procedure
02	Apply the matching wax corrosion-inhibiting primer as a continuous, even layer, working it into pits and irregular details.
03	Profile irregular details where required so the tape is not bridged.
04	Wrap the tape spirally with the specified overlap and press firmly.
05	Install outer protection where the asset is exposed to ultraviolet or mechanical attack.

STORAGE

Store sealed in the original packaging in a cool, dry, ventilated place, away from direct sunlight, open flame, strong heat, strong oxidising agents and sources of ignition. Keep clear of contamination. Unopened material can be stored long-term at ambient temperature.

HEALTH AND SAFETY

Warning. May cause mild skin, eye and respiratory tract irritation. Use in a well-ventilated place, keep away from high temperature, wear gloves and eye protection. Molten material can cause burns. Refer to the safety data sheet for the selected grade before use.

WASTE

Avoid or minimise waste wherever possible. Do not discard waste material, including packaging, in the surrounding environment. Follow all applicable disposal legislation.

DISCLAIMER

The information in this document is based on Zhuohuang product records, manufacturer data and third-party test reports available at the date of issue. Values are typical or standard configurations and are not universal acceptance limits. Product performance depends on substrate condition, surface preparation, geometry, operating temperature and exposure. Confirm the applicable grade, current packaging, project acceptance criteria and the relevant safety data sheet before order and application.

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