

VISCOWRAP HT

Product Data Sheet

SKPS®

Description

ViscoWrap HT is an amorphous, apolar, visco-elastic, semi-solid, polyolefin coating for corrosion prevention of underground and aboveground substrates for high temperatures. It is part of the Viscotaq coating system which consists of a corrosion protective inner layer (Viscowrap HT) and a mechanical protective outer layer. This coating system offers exceptional corrosion prevention and waterproofing for a variety of substrates.

Features

- ☑ Softening point +152,8° C/+307,04° F;
- ☑ Glass transition onset temperature -65° C, -85° F ;
- ☑ CD value:0mm (ISO21809:3:2016)at +23° C/+73,4° F;
- ☑ Self-healing in case of small damages;
- ☑ Impervious to moisture and gases;
- ☑ Adhesion to the substrate without primer;
- ☑ Keeps its plasticity over decades;
- ☑ Completely amorphous, forms one continuous coating;
- ☑ Permanent wetting characteristics;
- ☑ Eliminates Microbiological Induced Corrosion (MIC);
- ☑ No curing time, ready for backfill immediately;
- ☑ High chemical resistance;
- ☑ No sensitivity to salts and osmosis;
- ☑ 100% inert formulation: no ageing over time.

Uses

- Coating for concrete, steel, PVC, metal, wood, vinyl, and other coatings
- Soil-to-air transitions
- Pipe, flanges, Valves and fittings
- Girth welds
- Buried pipelines with minimal surface preparation
- Pipeline coating rehabilitation applications
- CUI applications
- End seal for pipe casing
- Tank chimes
- Waterproofing for bell and spigot joints



For more information, please contact us:

1549/TD/23_Page 01/03

Sap & Kaps Petroleum Services, LLC
Abu Dhabi, U.A.E.

+971 50 667 9697, +971 2 4474288
info@skps.com

Surface Preparation

- Surface inspected prior to application with any defects documented.
- Minimum surface preparation should be ST2/SSPC-SP2 (Hand Tool Clean).
- Once loose material are removed, clean surface with denatured alcohol or acetone to remove any remaining dust, grease, and moisture.
- Surface of substrate should be 5°F (3°C) or greater above the dew point.
- Keep the working area clean and dry at all times. Avoid the presence of water.

Application

1. ViscoWrap HT

- Remove the release liner and place the adhesive side onto the substrate (pipe).
- The initial wrap should be a straight circumferential wrap.
- Once completed, wrap the pipe with slight tension and a minimum of ½" overlap.
- Wrap at an angle to create a smooth overlap and to ensure no air pockets are formed during wrapping. End wrapping with a straight circumferential wrap.
- For coating repairs and difficult to reach areas ViscoWrap HT can be applied in pieces, strips, or individual circumferential wraps (cigarette wrap).

2. PVC Outerwrap or PE Outerwrap

- After wrapping of ViscoWrap HT is completed, immediately begin wrapping over the ViscoWrap HT with PVC Outerwrap or PE Outerwrap to complete the Viscotaq Coating System. PVC Outerwrap or PE Outerwrap should be wrapped with tension and a minimum of 50% overlap.
- The first and termination wraps should be a straight circumferential wrap.
- A ¼" section of ViscoWrap HT should still be visible at each end of the outerwrap application.

3. PU Composite Wrap

- PU Composite Wrap can be used in place of or in addition to the PVC Outerwrap or PE Outerwrap when additional mechanical protection is required.
- Do not open the foil pouch until ready to apply product.
- Once ready to apply the PU Composite Wrap, remove from the hermetically sealed, foil pouch using protective gloves and place in room-temperature water (salt or fresh) for 20-30 seconds. The roll should be immersed in water for a longer time when the environment is cold and/or dry.
- Remove and begin wrapping the surface tightly, overlapping a recommended 50% (55% for severely corrosive environments).
- After wrapping is completed, immediately begin wrapping Compression foil the same direction the layers of Compression foil were applied to compress it quickly and with tension applied.
- Once compressed, use the Perforating Tool to puncture the Compression foil. This will allow for excess resin, moisture, and carbon dioxide from the reaction to escape. Apply only enough pressure to puncture the Compression foil and not the layers of PU Composite Wrap.

Storage

Store in a dry, well-ventilated area between 40°F and 140°F (4°C to 60°C) in original, unopened containers. Shelf life is unlimited under these conditions. It is recommended that all components be stored between 68°F to 86°F (20°C to 30°C) for 24 hours prior to use for optimum product application characteristics.

Technical Data

Properties	Imperial	Metric
Material State	Semisolid	Semisolid
Thickness (ISO 4593:1993E)	70 mils avg.	1.8 mm avg.
Density (DIN 53479)	1.1-1.4	1.1-1.4
Glass Transition Temperature (ASTM E1356-03)	-45.26°F	-42.92°C
Softening Point (ASTM E1356-03)	306°F	152°C
Water Vapor Permeability (ASTM E96/96M-10)	<5.6 x 10 ⁻⁴ lb/day/ft ² /psi	<4 x 10 ⁻⁴ g/day/m ² /Pa
Water Absorption (ISO 62)	<0.03%	<0.03%
Cathodic Disbondment at 73°F (23°C) (ASTM G8-96/ISO 21809-3)	0-0 mm (Self-healing)	0 mm (Self-healing)
Cathodic Disbondment at 158°F (70°C)(ASTM G8-96/ISO 21809-3)	0 mm (Self-healing)	0 mm (Self-healing)
Volume Resistivity (ASTM D257-07)	>8.7 x 10 ¹² ohm*in	>2.2 x 10 ¹³ ohm*cm
Surface Resistivity (ASTM D257-07)	>6.0 x 10 ¹⁶ ohm*ft ²	>5.6 x 10 ¹⁵ ohm*m ²
Thermal Resistance	-45°F to 203°F	-45°C to 95°C
Dielectric Strength (ASTM D149-09)	>445 KV/in	>17.5 kV/mm
Impact Strength (ISO 21809-3 (2016) Annex D)	>133 in-lbf	>15 J (Immediate)
Indentation (ISO 21809-3 (2016) Annex E)	No holidays	No holidays
UV/Weather Cycle Test (ASTM D4587, 1000 Hours)	Excellent, rating 10	Excellent, rating 10
Wet Adhesion Test (CSA Z245-20-06 Sec. 12.14)	Excellent	Excellent
Chemical Resistance in Aggressive Soils Tested in Sulfuric Acid (30%), Nitric Acid (10%), Phosphoric Acid (20%), Hydrochloric Acid (10%)	Excellent No deterioration, 72 hours at 158°F / No corrosion, 72 hours at 158°F	Excellent No deterioration, 72 hours at 70°C / No corrosion, 72 hours at 70°C

Viscotag® HT plus suitable outer wrap meets the requirements of ISO 21809-3:2016 and NACE SP0109-2019 at Tmax 70 °C.