TK™-7

TK™-7 is a thin film, modified phenolic coating specifically formulated for use in high temperature and high pressure gas production environments containing CO_2 and H_2S. By design, TK-7 provides controlled diffusion of gases through the coating film. This characteristic prevents depressurization blistering that can occur in standard phenolic coating systems, while still providing superior corrosion protection. Standard coating systems are subject to blistering as gases and vapors attempt to escape from the coating during depressurization of the well. TK-7 has been utilized successfully in high CO_2 and H_2S gas production along the U.S. Gulf Coast for as long as twelve years at 325˚F *(163˚C)*. Consult your Tuboscope representative for the latest performance results using TK-7.

Specifications

Type	Modified Phenolic *(Liquid)*
Color	Tan
Temperature	400˚F *(204˚C)*
Pressure	To yield strength of pipe
Applied Thickness	5–8 mils *(127–203 µm)*
Primary Applications	Production tubing, wellhead, flowlines and downhole equipment.
Primary Service	Oil, natural gas, and CO_2 up to 400˚F *(204˚C)* and sour gas to 300˚F *(149˚C)* and above depending on concentration.
Limited Service	Well with high water cuts. *(Also see TK™-2 or TK™-69)*

Stimulation Fluids:

When stimulation fluids are charged through coated tubing, there is generally little effect if the fluids are flushed completely through the tubular. However, some organic acids, caustic and solvents may have a detrimental effect on certain organic coating systems and should be evaluated prior to use. If stimulation fluids are left in the tubing, they can reach formation temperature and cause accelerated attack on the coating. A Tuboscope representative should be consulted when stimulation is contemplated.

Sample of Testing Capabilities:

Thermal Analysis
- Differential Scanning Calorimeter *(DSC)*
- Thermomechanical Analysis *(TMA)*
- Thermogravimetric Analysis *(TGA)*

Spectroscopy
- Fourier Transform Infrared Spectrophotometer
- Electrochemical Impedance Spectroscopy *(EIS)*
- Contact Angle

Chromatography
- Gel Permeation Chromatograph *(SEC)*
- High Performance Liquid Chromatograph
- Gas Chromatograph

Additional Physical/Chemical Testing
- High Pressure Autoclaves
- Microscope Analysis
- Immersion Testing
- Flow Loop Analysis

Product Development
- Lab Compounding Capabilities

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