

MATERIAL SAFETY DATA SHEET

IDENTITY **TK®-15 (Cured System Applied)**

SECTION I

Manufacturer's Name: Tuboscope, a division of Varco, L.P.	Emergency Telephone Number: (713) 799-5100
Address: 2811 Holmes Road (77051) PO Box 808 Houston, TX 77001	Telephone Number for Information: (713) 799-8174
	Date Prepared: Revised June 2005
	Chemical Family: Modified Novolac Coating

SECTION II - Hazardous Ingredients/Identity Information

Hazardous Components	CAS	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Cured Epoxy Resin(s)	Proprietary	None Established	None Established		
Cured Phenolic Resin(s)	Proprietary	None Established	None Established		
Mineral Pigments	Mixture	5 mg/m ³	3 mg/m ³		
Titanium Dioxide	13253-67-7	10 mg/m ³	10 mg/m ³		
Amorphous Silica	112926-00-8	10 mg/m ³	10 mg/m ³		
Chromium Oxide	1308-38-9	0.5 mg/m ³	0.5 mg/m ³		

In the *cured system applied* state the inorganic components are encapsulated in a cured resin matrix.

All Tuboscope "TK®" coating mixtures of various components are proprietary trade secrets. Pursuant to 29CFR 1910.1200 (d)(5)(ii), a mixture which has not been tested as a whole to determine whether the mixture is a health hazard will be assumed to present the same health hazards as do its components which comprise one percent (1%) or greater, by weight or volume, of the mixture. The mixture, if it has not been tested as a whole, shall be presumed to present a carcinogenic hazard if it contains a component in concentrations of greater than one-tenth of one percent (0.1%) or greater which is considered to be a carcinogen. "TK®" coatings have not been so tested as a whole and, thus, because of characteristics of some of their components, the mixture as a whole must be considered a health hazard or a carcinogenic hazard.

SECTION III - Physical/Chemical Characteristics

Boiling Point: N/A	Specific Gravity (Water = 1): 1.5
Vapor Pressure (mm Hg): N/A	Melting Point: N/A
Vapor Density (Air = 1): N/A	Evaporation Rate (Butyl Acetate = 1): N/A
Solubility in Water: Negligible	
Appearance and Odor: Green colored topcoat with no discernable odor.	

SECTION IV - Fire and Explosion Hazard Data

Flash Point (Method Used): N/A	Flammable Limits: LEL N/A UEL N/A
Extinguishing Media: Water Fog; Foam; Dry Chemical; CO ₂	
Special Fire Fighting Procedures: Material will not burn unless preheated. Wear protective clothing and use self-contained breathing apparatus.	
Unusual Fire and Explosion Hazards: Exposure to fire generated decomposition products may cause a health hazard.	

SECTION V - Reactivity Data			
Stability	Unstable		Conditions to Avoid:
	Stable	X	
Incompatibility (Materials to Avoid): Strong oxidizing agents.			
Hazardous Decomposition or Byproducts: Oxides of carbon, sulfur and nitrogen; and unidentified organic compounds may be formed during combustion.			
Hazardous Polymerization	May Occur		Conditions to Avoid:
	Will Not Occur	X	
SECTION VI - Health Hazard Data			
Health Hazards Cured film is relatively inert. If the resin matrix is destroyed by mechanical or thermal means then inorganic components may be liberated. See Page 3 for health information on these materials.			
Route(s) of Entry:	Inhalation?	No	Skin? No Ingestion? Yes
Carcinogenicity:	NTP?	No	IARC Monographs? No OSHA Regulations? No
Signs and Symptoms of Exposure None known for intact film.			
Medical Conditions Generally Aggravated by Exposure: None known for intact film.			
Emergency and First Aid Procedures Intact film is relatively inert. Consult physician if questions arise.			
SECTION VII - Precautions for Safe Handling and Use			
Steps to be Taken in Case Material is Released or Spilled: Sweep or vacuum material into proper receptacle.			
Waste Disposal Method: Should be disposed of by a method that complies with local, state, and federal regulations.			
Precautions to be Taken in Handling and Storing: Avoid damaging the intact film.			
Other Precautions: Mechanical or thermal decomposition of the resin matrix could liberate materials which are potential health hazards.			
SECTION VIII - Control Measures			
Respiratory Protection (Specify Type): Use NIOSH approved respirator if resin matrix is destroyed and TLV of liberated component is exceeded.			
Ventilation: If resin matrix is destroyed provide as required to keep TLV below acceptable limits or to control dust generation.			
Protective Gloves: If resin matrix destroyed.	Eye Protection: Prudent practice.		
Other Protective Clothing or Equipment: N/A			
Work / Hygienic Practices: Use good industrial hygiene practices.			
The information contained herein is based on the data available to Tuboscope and is believed to be correct. However, Tuboscope makes no warranty, expressed or implied regarding the accuracy of these data or the results obtained from the use thereof.			

Health Effects and First Aid:

The cured coating system is relatively inert and presents no known health hazard. If the resin matrix is destroyed by mechanical or thermal means, then inorganic components may be liberated. Following is information on these materials. Thermal decomposition of the resin matrix produces oxides of carbon, sulfur, and nitrogen; and unidentified organic compounds which may also present a health hazard.

Inhalation of Inorganic Components Either Mechanically or Thermally Liberated:

Mineral Pigments – Nuisance dust which may cause irritation of the respiratory tract by mechanical action.

Wollastonite – Irritating to the mucous membranes and respiratory tract. Excessive exposures to dust may cause sore throat, coughing, or upper respiratory irritation.

First Aid: Remove to fresh air. If breathing is difficult, give oxygen. Call a physician.

Skin or Eye Contact with Inorganic Components Either Mechanically or Thermally Liberated:

Liberated inorganic components may cause mechanical skin and eye irritation. Wollastonite may also cause a dryness of the skin after long-term exposure to product dust.

First Aid: Flush eyes thoroughly with water. Wash skin with mild soap and water. If irritation persists call a physician.

Ingestion of Inorganic Components Either Mechanically or Thermally Liberated:

No adverse effects are expected from ingestion of liberated inorganic components. Mechanical irritation to the GI tract may occur. Consult physician if questions arise.

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