MATERIAL SAFETY DATA SHEET

SWAK® and Classic SWAK® February 2010

1. PRODUCT IDENTIFICATION

SWAK®: Anaerobic thread sealant

Manufactured by:
Swagelok Company
29495 F.A. Lennon Drive
Solon, Ohio USA 44139
Tel: (440) 349-5600

Emergency Contact:
Chemtrec (800) 424-9300

2. INGREDIENTS

Ingredients	CAS #	WT%	PEL
Polytetrafluoroethylene	9002-84-0	30-40	Not Available
Ethoxylated bisphenol A dimethacrylate	41637-38-1	30-40	Not Available
Poly (1, 2 Propylene Glycol Azelate) Ester	29408-67-1	20-30	Not Available
Titanium Dioxide	13463-67-7	1-5	15 mg/m3
Polyethylene Glycol	25322-68-3	1-5	Not Available

3. HEALTH HAZARD INFORMATION

- LD_{50} ..... Poly (1, 2 Propylene Glycol Azelate) Ester - 5g/kg oral, rat.
- LD_{50} ..... Polyethylene Glycol - 30g/kg oral, rat.
- LC_{50} ..... Not Available.

Routes of Entry

Skin Contact	Skin Absorption	Eye Contact	Inhalation	Ingestion
Yes	No	Yes	Yes	Yes

4. FIRST AID MEASURES

- If inhaled (Overexposure): If person is affected by fumes, remove person to fresh air. Seek medical attention.
- After contact with skin (Overexposure): Wash thoroughly with soap and water. If severe irritation develops, seek medical attention.
- After contact with eyes: Rinse thoroughly with water for 15 minutes, seek medical attention. Do not rub eyes.
- If swallowed: Seek medical attention.
- Medical Information: Inhaling decomposition products can cause temporary influenza-like symptoms which are described as “polymer fume fever”. Symptoms include fever, cough and malaise. Contaminated smoking material may produce fluorinated compounds.

5. FIRE FIGHTING MEASURES

- Suitable extinguishing agents: Carbon dioxide, foam, agent suitable for environment.
- Unsuitable extinguishing agents: None known.
- Special dangers caused by substance preparation itself, by combustion products or gases formed: At temperatures above 482°F/250°C, may produce decomposition products containing carbon monoxide, carbon dioxide, hydrogen fluoride, and perfluoro hydrocarbons.
- Additional information: None.

Autoignition	UEL	LEL	Sensitivities
Not Applicable	Not Available	Not Available	Not Available

6. ACCIDENTAL RELEASE MEASURES

- Measures for protection of people: Eye and hand protection as needed to minimize excessive exposure.
- Measures for protection of the environment: None required.
- Cleaning measures: Use absorbent material and suitable cleaner.
- Additional information: None.

7. HANDLING AND STORAGE

- Safety information: None.
- Information on protection from fire or explosion: Product may burn at high temperatures.
- Additional information: Store in a cool, dry place for optimal product performance.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

- Precautionary measures to protect employees: None required.
- Respiratory protection: None required.
- Hand protection: Rubber gloves are recommended to minimize exposure.
- Eye protection: Safety glasses or goggles are recommended to minimize exposure.
- Skin protection: Wash hands after use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Odor	pH	Density	Vapor Pressure
Grainy Off-White	Slight Odor	Not Applicable	1.3 gm/cm^3	Not Available
Boiling Point	**Melting Point**	**Flash Point**	**Flammability**	**Explosive**
Not Available	Not Available	>230°F/110°C	Not Available	Not Applicable

10. STABILITY AND REACTIVITY

- Conditions to avoid: At temperatures above 482°F/250°C, hazardous fumes may be generated.
- Materials to avoid: Pure oxygen, fluorine, chlorine. Oxidizers, strong reducers, free radical initiators, oxygen scavengers, peroxides, persulfates, accelerators, strong bases, and strong acids.
- Hazardous decomposition products: See Sections 4 and 5.

11. TOXICOLOGICAL INFORMATION

- Acute toxic properties: None known.
- Health effects: See Sections 4 and 5.
- Additional health effects: None known.

Sensitization	Teratogenicity	Reproductive Toxicity	Mutagenicity	Synergistic Products
Not Available	Not Available	Not Available	Not Available	Not Available

Carcinogenicity
Titanium dioxide has been listed as a possible human carcinogen by IARC (Group 2B). According to IARC, some inhalation studies on experimental animals have suggested the carcinogenicity of high concentrations of titanium dioxide. However, studies do not suggest an increased risk of cancer in humans from exposure to titanium dioxide pigment.

12. ECOLOGICAL INFORMATION

- Mobility: Paste-like viscosity.
- Degradability: Not established.
- Accumulation: No known adverse bioaccumulation or biomagnification effects.
- Short/Long term effects on ecotoxicity: No known ecological effects.

13. DISPOSAL CONSIDERATIONS

- Appropriate methods of disposal: Unused product not considered a hazardous waste in the United States. Dispose of in a responsible manner.
- European Community (EC) considerations: Use appropriate waste codes based on ingredients.

14. TRANSPORT INFORMATION

- Transport precautions: Consult applicable regulations when transporting this product.
- Additional information: None.

15. REGULATORY INFORMATION

- US/Canadian regulation listings: SARA 313 - NO, TSCA - YES, Canada's Controlled Products - Yes
- Additional information: Consult country codes for specific requirements.

16. OTHER INFORMATION

- For further information contact: Your Swagelok Distributor or the contacts listed in Section 1 of this sheet.
- Sources of information used to compile document: Properties of individual ingredients were used to compile this document. This Material Safety Data Sheet was designed to give the distributors and users of SWAK® information to handle and use the product in a responsible manner.

Preparation Data		
Environmental and Safety Department	(440) 349-5962	February 2010