



MATERIAL SAFETY DATA SHEET

WL-21

November 2006

1. PRODUCT IDENTIFICATION

WL-21: Valve lubricant

Manufactured by:
Swagelok Company
29495 F.A. Lennon Drive
Solon, OH 44139-3933
Tel: (440) 349-5600
Fax: (440) 519-3304

Emergency Contact:
Chemtrec (800) 424-9300

2. INGREDIENTS

Table with 4 columns: Ingredients, CAS #, WT%, PEL. Rows include Perfluorinated Polyether and Polytetrafluoroethylene.

3. HEALTH HAZARD INFORMATION

- European Community Danger Group:..... None
Special Hazards for man or environment: None
LD50..... Perfluorinated Polyether >40g/kg

Routes of Entry

Table with 5 columns: Skin Contact, Skin Absorption, Eye Contact, Inhalation, Ingestion. Values: No, No, Yes, Yes, Yes.

4. FIRST AID MEASURES

- If inhaled (Overexposure): Unlikely to be inhaled; however if a 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.



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5. FIRE FIGHTING MEASURES

- Suitable extinguishing agents: Carbon dioxide, foam, water, agent suitable for environment.
- Not suitable for safety reasons: None known.
- Special dangers caused by substance preparation itself, by combustion products or gases formed: Fluoropolymers will degrade upon prolonged heating or in a fire, liberating hydrogen fluoride (HF) and carbonyl fluoride (COF₂). This gas is toxic if inhaled or it comes into contact with moist skin. HF has an ACGIH PEL TLV (8hr TWA) of 0.5ppm and a ceiling limit of 2 ppm (1.7mg/m³). COF₂ has an ACGIH TLV of 2 ppm (5.4 mg/m³) and an OSHA PEL TWA of 2 ppm (5 mg/m³).
- Additional information: None.

ppm

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: May decompose when heated above 554°F/290°C.
- 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 White Paste	Odor Neutral	pH Not Applicable	Density 1.8 gm/cm ³	Vapor Pressure Not Applicable
Boiling Point Not Applicable	Melting Point Not Available	Flash Point Not Available	Flammability Not Applicable	Explosive Not Applicable



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10. STABILITY AND REACTIVITY

- Conditions to avoid: At temperatures above 554°F/290°C, hazardous fumes may be generated.
- Materials to avoid: Alkali metals and halogenated compounds. Strong or non-aqueous alkali or Lewis acids above 100 C/212 F.
- 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	Carcinogenicity
Not Available	Not Available	Not Available	Not Available	Not Available	Listed ingredients are not suspected carcinogens according to NTP, IARC, and OSHA

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.



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14. TRANSPORT INFORMATION

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

15. REGULATORY INFORMATION

- EC regulations: This product has been classified under CHIP-96 guidelines based on chemical content.
- US/Canadian regulation listings: SARA 313 - NO, TSCA - YES, Canada's Controlled Products - No
- EC Relevant risk: None
- EC Relevant safety: S: 37/39 - Wear suitable gloves and eye/face protection.
S:20 - When using do not eat or drink.
- Additional information: Consult country codes for specific requirements.

16. OTHER INFORMATION

- 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 WL-8 information to handle and use the product in a responsible manner.

Preparation Data		
Environmental and Safety Department VSG Product Engineering	(440) 349-5955	November 2006