



SPECIALIZED LUBRICANTS

1. Substance/Product Identification

Product Name: 309 Energized Electrical Cleaner

Company/Address: Schaeffer Mfg

102 Barton Street

Saint Louis, Missouri 63104

USA

Synonyms:

Preparation/Revision Date: 08/04/2010 Product Use/Type: Cleaning Solvent

Emergency Phone Number: +1 314 865-4105 (24-hour response number)

+ 1 314 865-4100 (Business hours 8:30AM-5:00PM)

1-800-325-9962 (US & Canada)

Website: www.schaefferoil.com MSDS Number: 309 Version 1.0

2. Hazards Identification

Appearance: Clear colorless liquid

Odor: Solvent ether like odor

Principal Hazards: Warning Toxic by inhalation. May cause skin irritation.

Contents under pressure and may explode if heated.

Hazardous Materials Information System

(U.S.A) Health: 2

Fire: 0

Reactivity: 0

PPE: B:

National Fire Protection Agency System

(U.S.A.) Health: 2

Fire: 0

Reactivity: 0

See Section 11 for complete health hazard information

3. Composition and Information on Ingredients

Hazardous Ingredients

Ingredient Name	CAS No.	EU Number	Percentage (by wt.)
Perchlorethylene	127-18-4	204-825-9	60 – 100
Acetone	67-64-1	200-662-2	1-5
Carbon dioxide	124-38-9	204-696-9	1-5

4. First Aid Measures

Ingestion: If swallowed, do not induce vomiting. Seek medical attention immediately **Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes. Hold eyelids while flushing to rinse the entire surface of the eye and lids with water. Seek medical attention immediately.

Inhalation: Remove to fresh air. If breathing is difficult administer oxygen. Seek medical attention immediately if upper respiratory tract irritation persists

Skin: Wash with plenty of soap and water. Launder contaminated clothing. Seek medical attention if skin irritation develops or persists

Additional Information: In case of an accident or if the you feel unwell seek medical attention immediately

5. Fire Fighting Measures:

Flash Point: Non-flammable. No flash point when using closed cup methods

Extinguishing Media: Powder, foam, carbon dioxide

Firefighting Procedures: Wear full protective clothing and positive pressure breathing

apparatus

Unusual Fire & Explosion: small amounts of phosgene and chlorine can be produced

during combustion

Hazards: Aerosol containers may explode when heated

6. Accidental Release Measures

Spill Procedures and Clean up methods: Ventilate spill area. Contain spill and recover liquid when possible. Absorb spills with absorbent material. Use non-sparking tools and equipment. Keep out of drains, sewers, ditches and waterways. **Personal Precautions:** Avoid contact with skin and eyes. Avoid inhalation of vapors. Wear appropriate personal protective equipment when cleaning up a spill **Environmental Precautions:** This product should be kept out of watercourses and waterways. This product is a severe water pollutant, if spilled into waterways, watercourses, lakes or streams this material may be toxic to aquatic life. Notify appropriate authorities if the product is accidently released on spilled into the environment.

7. Handling & Storage

Handling: Keep away from sources of ignition. Wash thoroughly after handling and before eating, smoking or using toilet facilities. Avoid contact with skin and eyes. Do not swallow product. Do not inhale vapors or mists. Do not expose containers to heat, sparks or open flames

Storage: Do not store product at elevated temperatures. Store the product as a flammable or combustible liquid. Store in a cool dry place that has adequate ventilation. Do not store near food or feed products. Keep containers closed when not in use. Do not store above 120°F (49°C)

8. Exposure Controls and Personal Protection

Occupational Exposure Limits

Ingredient	OSHA TWA	OSHA STEL	ACGIH TWA	ACGIH STEL
Perchlorethylene	25 ppm		25 pp	
Acetone	1000 ppm		500 ppm	
Carbon dioxide	5000 ppm		5000ppm	

- (s)-Skin exposure
- (p) proposed limit
- (c) Ceiling limit
- (I) Recommended exposure limit
- (u) supplier limit
- (N/E) not established

Other Exposure Limits

Engineering Controls: Local exhaust ventilation recommended if any vapors, dust or mists are generated. If applicable use process enclosures, local exhaust ventilation and other engineering controls to maintain airborne levels below recommended exposure limits.

Personal Protective Equipment

Gloves: Solvent resistant gloves **Gloves:** Chemical resistant gloves

Protective Clothing: Apron and long sleeves recommended

Eye Protection: Chemical resistant type goggles should be worn. Avoid wearing

contact lenses.

Respiratory Protection: Airborne concentrations should be kept at the lowest levels possible. If any vapors or mists are generated and the occupational exposure limit of the product is exceeded, use appropriate NIOSH or MSHA approved respirator

9. Physical and Chemical Properties

Flash Point: Non-flammable. No flash point when using closed cup methods

Specific Gravity: 1.54 (concentrate only)

Upper Flammable Limit (UEL): Not determined Lower Flammable Limit (LEL): Not determined

Vapor Pressure: Not determined

Vapor Density (air =1): Not determined

Percent Volatile: 0% (US Federal/CARB/OTC/LADCO)

Evaporation Rate: >1 (Water = 1)

pH: Not applicable

Boiling Point: Not determined
Melting Point: Not determined
Appearance: Clear colorless liquid
Odor: Solvent ether like odor

Solubility in Water: Insoluble

The above data are typical values and do not constitute a specification. Vapor pressure data are calculated unless otherwise specified

10. Stability and Reactivity

Stability: Stable under conditions of normal use and storage. Contents are under pressure. Container may explode if heated. Do not puncture or burn. Keep in a cool place.

Materials to Avoid: Strong oxidizing and reducing agents, aluminum, magnesium,

reactive metals

Polymerization: Will not occur

Thermal Decomposition: Carbon monoxide, carbon dioxide, HCI, small amounts of

phosgene and chlorine

Conditions to Avoid: None under conditions of normal use

11. Toxicological Information:

Routes of Exposure: Skin, eyes, and inhalation

Target Organs: Skin, eyes, and upper respiratory tract.

Acute Exposure

Ingestion: Harmful. Not a normal route of exposure. Can cause lung damage if swallowed

Eye Contact: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the cornea.

Skin Contact: May cause skin irritation. Handling can cause dry skin

Inhalation: Toxic by inhalation. May cause respiratory tract irritation. May cause asphyxiation. This product may be aspirated into the lungs and cause chemicals pneumonitis. Vapors may cause drowsiness and dizziness

Dermal Sensitization: This product can be a dermal sensitizer

Inhalation Sensitization: This product may be an inhalation sensitizer

Carcinogenicity: Perchloroethylene is listed by ACGIH, IRAC, NIOSH, NTP and

OSHA as a category G-A3, I-2A, N2 and CP65 potential carcinogen

Additional Toxicological Information: Effects of overexposure to the chemicals in this product may cause liver abnormalities, kidney, spleen, lung, brain damage or cardiac abnormalities. Perchloroethylene has been shown to increase the rate of spontaneously malignant tumors in certain laboratory rats and mice.

11. Toxicological Information:

Acute Toxicity

Perchloroethylene Oral LD50 – 2,629 mg/kg (rat) Inhalation LC50 – 34.2 g/m³ 8hours (rat) Dermal LD50 - >20,000 mg/kg (rabbit)

Acetone

Oral LD50 – 5800 mg/kg (rat) Dermal LD50 – 20,000 mg/kg (rabbit)

12. Environmental and Ecological Information

Ecotoxcity

Perchloroethylene

LC50 (96 hour) – 4.99 mg/l (Oncorhynchus mykiss) LC50 (96 hour) – 13.4 mg/l (Pimephales promelas)

LC50 (96 hour) - 10.2 mg/l (Mysidoss bahia)

LC50 (24 hour) – 3.2 mg/l (Daphina Magna)

Acetone

LC50 (96 hour) - 5,540 mg/l (Salmo gairdneri)

LC50 (96 hour) - 6,120 - 9,120 mg/l (Pimephales promelas)

EC50 (96 hour) – 16,700 mg/l (Nitocra spinies)

LC50 (48 hours) - 9,900 mg/l (Daphina pulex)

Environmental Fate

Biodegradation: This product is not readily biodegradable

Bioaccumulation: This product is not expected to bioaccumulate

Water Class Hazard (Germany): WK-3 severe water pollutant according to appendix 4

VwVwS dated 27.7.2005

13. Disposal Considerations

Waste Handling and Disposal: Dispose of product in accordance with all applicable local, state, provincial and Federal rules and regulations. This product in its neat form if considered to be a RCRA hazardous waste due to the presence of Perchloroehtylene D039

14. Transport Information

US DOT Classification Non-Bulk: ORM-D

US DOT Classification Bulk: Not applicable

IMDG Classification: UN 1950, Aerosols, N.O.S., (Perchloroethylene), 2.3, Limited

Quantity, Marine Pollutant, (Perchloroethylene)

IATA/ICAO Classification: UN 1950, Aerosols, N.O.S., (Perchloroethylene), 2.3,

Limited Quantity, Marine Pollutant, (Perchloroethylene)

15. Regulatory Information

Hazard Symbols





Xn Harmfu

US Regulations

TSCA Inventory: All of the components in this material are on the US TSCA Inventory or are exempt.

State of California Proposition 65: This product contains Perchloroethylene which is listed on the State of California's Proposition 65 List as a possible cancer causing agent and reproductive toxin

15. Regulatory Information

US EPA SARA Title III and CERCLA Listings and Reportable Quantities

US EPA Section 311/313 Classifications

Acute (Immediate) Chronic (Delayed) Fire Reactive Pressure Generating X X

US EPA Section 313 Chemicals

Perchloroethylene CERCLA RQ 100 lbs (45.36 kgs) Acetone CERCLA RQ 5,000lbs (2267.95 kgs)

US Tariff Heading Number: 2903.29.0000

Schedule B Number: 2903.29.000

Other Regulations:

Canada: All of the ingredients of this product are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substance List

Canadian WHMIS Classifications and Symbols:



Class A – Compressed Gas

Class D1B – Toxic Material

Class D2A - Carcinogenicity

Class D2B - Chronic Toxic Effects

Class D2B – Skin/Eye Irritant

EEC: All components are in compliance with the EC Seventh Amendment Directive 92/32/EEC

16. Other Information

For additional information call +1 314-865-4100 (outside the US and Canada) or 1-800-325-9962 inside the United States and Canada.

Although the information and recommendations set forth herein (hereafter referred to as information) are presented in good faith and believed to be accurate and factual as of the date hereof, Schaeffer Mfg. Company makes no representation as to the completeness or accuracy thereof. Information is supplied upon the condition that the person receiving the same will make their own determination as to its safety and suitability for their purposes prior to use. In no event will Schaeffer Mfg. Company be responsible for damages of any natures whatsoever resulting from the use or reliance upon information. No representation or warranty, either expressed or implied, of merchantability or fitness for a particular purpose is made with respect to information of the product to which the information refers. Compliance with all applicable federal, state, and local regulations remains the responsibility of the user.