



CYCLO[®] INDUSTRIES, LLC

MATERIAL SAFETY DATA SHEET

This MSDS is being provided to your company for the purpose of providing current health and safety information to your management and for your employees who work with this product. Please read the information on these sheets and then provide this information to those people at your company whose responsibility it is to comply with FEDERAL, STATE and COMMUNITY RIGHT TO KNOW regulations. Also, make this information available to any employee who requests it.

If Cyclo Industries, LLC considers the formula of this product to be a trade secret, the exact chemical names of the ingredient(s) and the percentages in which they are combined will not appear in the body of this sheet. The exact composition is available upon request to physicians, industrial hygienists and other health professionals.

SECTION I – PRODUCT & COMPANY IDENTIFICATION

Product Name: Cyclo[®] Parts, Tools & Brake Cleaner, Stock No. C-109

Product Use: Economical, non-flammable cleaner that cleans metal surfaces, parts, tools, C.V. joints, clutches and brakes. Helps clean small parts before assembling engines, transmissions, etc. Also helps clean mating surfaces before using silicone sealants or adhesives.

Manufactured by: Cyclo Industries, LLC
10190 Riverside Drive, Palm Beach Gardens, Florida 33410-4881
Telephone: (561) 775-9600

First Aid Emergency: (800) 752-7869 or (312) 906-6194

Shipping Emergency: (800) 424-9300 or (703) 527-3887 (CHEMTREC)

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

CAS Reg. No.	Material	Percentage	Exposure Limits
127-18-4	Perchloroethylene	85 – 100	100 ppm = OSHA PEL TWA 200 ppm = OSHA PEL Ceiling Limits 25 ppm = ACGIH TLV TWA 100 ppm = ACGIH TLW STEL
124-38-9	Carbon Dioxide	1 – 15	5000 ppm = OSHA PEL TWA (exposures <10,000 ppm to be cited de minimus) 5000 ppm = ACGIH TLV TWA 30,000 ppm = ACGIH TLW STEL

SECTION 3 – HAZARDS IDENTIFICATION

Emergency Overview: Contents under pressure. Harmful if inhaled. May be fatal if swallowed. DANGER: SUSPECTED CANCER HAZARD. May cause severe eye irritation. Harmful if absorbed through the skin.

Carcinogenicity: Perchloroethylene - NTP Carcinogen = Listed – Suspect Carcinogen
IARC Monographs = Group 2A (Probable carcinogenic to humans)
OSHA Regulated = Possible Select Carcinogens

SECTION 4 – FIRST AID MEASURES

First Aid Procedures:

Ingestion: If swallowed, do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person. Get medical attention. If vomiting occurs, keep head lower than hips to prevent aspiration

Skin Contact: Wash with soap and water for 15 minutes. If irritation persists or signs of toxicity occur, seek medical attention. Remove contaminated clothing and shoes, and launder before reuse.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Get medical attention.

Eye Contact: In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

SECTION 5 – FIRE FIGHTING MEASURES

Flash Point: None **Method Used:** TAG Closed Cup

Flammable Limits in Air by Volume: Lower Explosion Level (LEL) = Not determined
Upper Explosion Level (UEL) = Not determined

Extinguishing Media: Use extinguishing media appropriate for surrounding fire. Use water spray to keep containers cool that are exposed to heat or flames.

Special Fire Fighting Procedures: Wear approved positive-pressure self-contained breathing apparatus and protective clothing. Avoid skin contact.

Hazardous Combustion Products: Hydrogen chloride, phosgene, chlorine

HMIS Code: Health = 2 Flammability = 0 Physical Hazard = 2
NFPA Rating: Health = 2 Flammability = 0 Reactivity = 0

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective clothing and equipment to prevent skin and eye contact. Avoid breathing gas. When air borne exposure limits are exceeded, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components.

SECTION 6 – ACCIDENTAL RELEASE MEASURES continued

Spill/Leak Procedures: Contain any liquid from leaking containers. Ventilate spill area. Soak up material with absorbent and place in chemical waste container. Avoid breathing vapors. Do not puncture or incinerate container. Contents under pressure. Wear proper protective equipment as specified in the protective equipment section. Leaking containers should be removed to an isolate, well-ventilated area and transferred to other suitable containers.

Environmental Precautions: Do not allow to enter sanitary drains, sewer or surface and subsurface waters. Keep out of lakes, ponds or streams.

SECTION 7 – HANDLING AND STORAGE

Handling Procedures: Contents under pressure. Use only in a well ventilated area. Avoid breathing vapors. If exposed to high vapor concentration, leave area at once. Avoid contact with skin and eyes. Do not puncture or incinerate (burn) cans. Exposure to high temperatures may cause bursting. Keep away from heat and open flame. This material or its vapors in contact with flames or hot glowing surfaces may form corrosive acid fumes. See product label for additional information. KEEP OUT OF THE REACH OF CHILDREN.

Storage Procedures: DO NOT store in the passenger compartment of an automobile. Do not store above 120°F (50°C).

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection: Do not breathe mist or vapor. Use in a well ventilated area. Appropriate respiratory protection shall be worn when applied engineering controls are not adequate to protect against inhalation exposure.

Ventilation: Use in a well ventilated area. Local exhaust ventilation as necessary to maintain exposures to within applicable limits.

Skin Protection: Avoid skin contact. Wear protective clothing and gloves.

Eye Protection: Safety glasses with splash guards or full face shield is recommended.

Work/Hygienic Practices: Eye washes and safety showers in the workplace are recommended.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 250°F (121°C)

Specific Gravity (H₂O=1): 1.62 @ 25°C

Vapor Pressure: Approx. 13 mmHg @ 20°C

Vapor Density (Air=1): 4.1 Approximate

Solubility in Water: >65%

pH: Not determined

Evaporation Rate (Butyl Acetate = 1): Not determined

Appearance and Odor: Clear, colorless liquid with faintly sweet odor

Volatile Organic Compound (VOC) (as packaged minus water): Not determined

SECTION 10 – STABILITY AND REACTIVITY**Stability:** Stable**Hazardous Polymerization:** Will not occur.**Conditions to Avoid:** Do not expose to heat or store at temperatures above 120°F. Avoid contact with open flame, electric arcs or other hot surfaces that could cause thermal decomposition.**Incompatibility (materials to avoid):** Nitric acid, sulfuric acid, strong acids, contact with oxidizing agents, chlorine compounds, chloroform, alkalis, potassium t-butoxide, strong bases**Hazardous Decomposition or Byproducts:** Carbon monoxide. The thermal decomposition products of this material are categorized as very toxic by the University of Pittsburgh toxicity of combustion products test method.**SECTION 11 – TOXICOLOGICAL INFORMATION**

Ingredient / CAS #	Route	Species	Dose
Perchloroethylene / 127-18-4	Inhalation	Rats	LC50 34200 mg/m ³ /8H

SECTION 12 – ECOLOGICAL INFORMATION**Aquatic/Terrestrial Toxicity Environmental Fate** No data is available at this time.**SECTION 13 – DISPOSAL CONSIDERATIONS****Waste Disposal Method:** Dispose of in accordance with local, state and federal regulations. Before attempting clean up, refer to other sections of this MSDS for hazard caution information.**SECTION 14 – TRANSPORT INFORMATION****U.S. DOT****Shipping Description:** Aerosol, Consumer Commodity ORM-D**ID Number:** Not applicable**Hazard Class:** ORM-D**Packing Group:** Not applicable**Label:** Not applicable**Placards:** Not applicable**IMDG****Shipping Description:** Aerosol, Limited Quantity**ID Number:** UN1950**Hazard Class:** 2**Packing Group:** Not applicable**Label:** Not applicable**Markings:** Marine Pollutant**Placards:** Not applicable

SECTION 15 – REGULATORY INFORMATION
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TSCA Inventory: All components of this product are listed on the Toxic Substance Control Act (TSCA) Inventory of chemical substances maintained by the U.S. Environmental Protection Agency.

SARA Extremely Hazardous Substances None

SARA Section 313 This product contains the following toxic chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372 (SARA 313 – Toxic Chemical Release Reporting)

<u>Chemical Name</u>	<u>CAS#</u>	<u>Weight %</u>
Perchloroethylene	127-18-4	85 - 100

CERCLA/Superfund (RQ):

<u>Chemical Name</u>	<u>CAS#</u>	<u>RQ</u>
Perchloroethylene	127-18-4	100 lbs.

California Proposition 65: Perchloroethylene is listed on the California Proposition 65 Cancer List – initial date 4/1/88.

SECTION 16 – OTHER INFORMATION

Document Date: April 1, 2004

Supersedes: 9/8/98

Revisions: Sections: 2 Removed Trichloroethylene and Xylene, 3, 5, 9, 10, 11, 12, 13, 15 – update to EU format

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