# CYCLO<sup>®</sup> 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 1 – PRODUCT & COMPANY IDENTIFICATION			
Product Name:	Cyclo <sup>®</sup> Quick Dry <sup>тм</sup> Electronic Cleaner, Stock No. C-87		
Product Use:	Precision cleaner designed to replace CFC products where lower flashpoint solvents may be used. Instantly removes oil, grease, dirt, flux and other grime from electrical and electronic parts.		
Manufactured by:	Cyclo Industries, LLC 10190 Riverside Drive, Palm Beach Gardens, Florida 33410-4881 Telephone: (561) 775-9600		
First Aid Emergenc Shipping Emergenc	• • • •		

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS					
CAS Reg. No.	Material	Percentage	Exposure Limits		
142-82-5	Heptane	90 - 100	400 ppm = OSHA PEL		
			400 ppm = ACGIH TLV		
67-56-1	Methanol	0.1 - 10	200 ppm = OSHA PEL		
			200 ppm = ACGIH TLV		
124-38-9	Carbon Dioxide	0.1 - 10	10000 ppm = OSHA PEL		
			5000 ppm = ACGIH TLV		

## SECTION 3 – HAZARDS IDENTIFICATION

## **Effects of Overexposure:**

Ingestion: Not a likely route of exposure.
Inhalation: Respiratory irritation, headache, nausea, fatigue, drowsiness, impaired coordination.
Skin Contact: Contact may dry the skin; prolonged contact may cause moderate irritation. Not easily absorbed. Solvent action can dry and defat the skin causing the skin to crack, leading to dermatitis.
Eye Contact: Liquid or vapor can cause moderate to severe irritation.

#### SECTION 3 – HAZARDS IDENTIFICATION continued

#### Health Hazards (Acute and Chronic):

ACUTE:Eye irritant.Possible skin irritant.CHRONIC:None known.

**Carcinogenicity:** NTP Carcinogen = No; IARC Monographs = No; OSHA Regulated = No

# Medical Conditions Generally Aggravated by Exposure: None known.

## SECTION 4 – FIRST AID MEASURES

#### **First Aid Procedures:**

Ingestion: If swallowed, seek immediate medical advice and/or attention.
Skin Contact: Wipe off with towel. Wash with soap and water. Get medical attention if irritation persists.
Inhalation: Remove to fresh air. Administer oxygen if needed. Apply artificial respiration if breathing has stopped. Get medical attention.
Eye Contact: Wash immediately with large volumes of fresh water for at least 15 minutes. Get medical attention

#### **SECTION 5 – FIRE FIGHTING MEASURES**

**Flash Point:** 18°F (-7.77°C)

Method Used: TCC

## Flammable Limits in Air by Volume:

Lower Explosion Level (LEL) = 1.2

Upper Explosion Level (UEL) = 36

Extinguishing Media: Foam, CO<sub>2</sub>, dry chemical, water fog

- **Special Fire Fighting Procedures:** Water spray may be ineffective. Water may be used to cool containers to prevent pressure build-up and explosion when exposed to extreme heat. If water is used, fog nozzles preferred. Wear goggles and self-contained breathing apparatus.
- **Unusual Fire and Explosion Hazards:** Closed containers may explode from internal pressure build-up when exposed to extreme heat and discharge contents. Vapor accumulation can flash or explode if ignited. Overexposure to decomposition products may cause a health hazard. Symptoms may not be readily apparent. Obtain medical attention.

**HMIS Code:** Health = 1 Flammability = 4 Reactivity = 0

#### SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Spill/Leak Procedures:** Avoid breathing vapors. Ventilate area. Remove all sources of ignition. Clean up area with absorbent material and place in closed containers for disposal.

#### SECTION 7 – HANDLING AND STORAGE

- **Handling Procedures:** Use in cool, dry, well-ventilated areas. Vapors may cause flash fire. To prevent vapor build-up, open doors and windows or use an explosion-proof exhaust fan to ensure fresh air exchange during and after use. Do not breathe vapor, gas or spray mist. When using, do not eat, drink or smoke. Avoid contact with eyes, skin and clothing. Wear protective equipment. Wash thoroughly after handling. Remove contaminated clothing and wash it before reuse. Keep away from heat, sparks and flame. Do not puncture or incinerate (burn) cans. Do not stick pin, nail or any other sharp object into opening on top of can. Do not spray in eyes. See product label for additional information. KEEP OUT OF THE REACH OF CHILDREN.
- **Storage Procedures:** Store and use in cool, dry, well-ventilated areas. Vapors may cause flash fire. Do not store above 120°F. Do not store in basements.

#### SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

- **Respiratory Protection:** Avoid breathing vapors. Use with adequate ventilation equal to out of doors. In restricted areas, use approved chemical/mechanical filters designed to remove a combination of particles and vapor. In confined areas, use approved air line type respirator or hood. Self-contained breathing apparatus is required for vapor concentrations above PEL/TLV limits.
- **Ventilation:** Sufficient to prevent inhalation of solvent vapors. General dilution and/or local exhaust ventilation in volume or pattern to keep PEL/TLV of most hazardous ingredient below acceptable limit and LEL below stated limit.

Protective Gloves: Solvent resistant required for prolonged or repeated contact.

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

**Other Protective Equipment:** Solvent resistant apron or other clothing is recommended.

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

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

**Boiling Range:** 147°F - 208°F (64°C - 98°C)

Vapor Pressure:mmHg @ TempHeptane4072Methanol10070Carbon Dioxide3865060

Specific Gravity ( $H_2O=1$ ): 0.72

Vapor Density: Heavier than air

Solubility in Water: Nil

**Evaporation Rate (Butyl Acetate = 1):** Slower than ether

Appearance and Odor: Aerosol product

Volatile Organic Compound (VOC) (as packaged minus water): 97%

#### SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable

Conditions to Avoid: Application to hot surfaces. Storage above 120°F. Exposure to open flame.

Incompatibility (materials to avoid): Strong oxidizing agents.

Hazardous Decomposition or Byproducts: May produce fumes when heated to decomposition. Fumes may contain carbon monoxide and other toxic fumes.

Hazardous Polymerization: Will not occur.

## SECTION 11 – TOXICOLOGICAL INFORMATION

Long-term toxicological studies have not been conducted for this product. See Section 3 of this MSDS for acute symptoms of overexposure and carcinogenicity information.

# 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:	Aerosols, Consumer Commodity ORM-D
ID Number:	Not applicable
Hazard Class:	Not applicable
Packing Group:	Not applicable
Label:	Not applicable
Placards:	Not applicable

## IMDG

Shipping Description:	Aerosols, Limited Quantity
<b>ID Number:</b>	UN1950
Hazard Class:	2
Packing Group:	Not applicable
Label:	Not required
Markings:	Not required
Placards:	Limited Quantity

#### SECTION 15 – REGULATORY INFORMATION

**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)

Chemical Name	<u>CAS#</u>	Weight %
Methanol	67-56-1	0.1 - 10

CERCLA/Superfund (RQ): Methanol (5,000 lbs.)

**California Proposition 65:** This product does not contain chemicals known to the State of California to cause cancer, birth defects and other reproductive harm.

# SECTION 16 – OTHER INFORMATION

**Document Date:** 5/22/03

Supersedes: 4/17/01

**Revisions:** Section 2 – Changed to Heptane, added sections 12, 14 and 15

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