



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number 064-002
Product name Energized Electrical Equipment Cleaner & Degreaser
Effective date 13-Sep-2011
Company information Claire Manufacturing Co.
1005 S. Westgate Drive
Addison, IL 60101 United States
Company phone General Assistance 630-543-7600
Emergency telephone US 800-424-9300
Emergency telephone outside US 703-527-3887
Version # 01

2. Hazards Identification

Emergency overview Aerosol. CONTENTS UNDER PRESSURE. May be ignited by heat, sparks or flames. Irritating to skin. Irritating to eyes. Irritating to respiratory system. Prolonged exposure may cause chronic effects. May cause cancer.

Potential health effects

Routes of exposure Skin contact. Inhalation. Ingestion.

Eyes Causes eye irritation.

Skin Irritating to skin. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

Inhalation Intentional misuse by concentrating and inhaling the product can be harmful or fatal. Irritating to respiratory system. Prolonged inhalation may be harmful.

Ingestion Exposure by ingestion of an aerosol is unlikely. May cause delayed lung damage. Components of the product may be absorbed into the body by ingestion.

Target organs Central nervous system. Lungs.

Chronic effects May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. May cause delayed lung damage. Prolonged skin contact may defat the skin and produce dermatitis.

Signs and symptoms Discomfort in the chest. Narcosis. Jaundice. Defatting of the skin. Irritation.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Trichloroethylene	79-01-6	> 90
Carbon Dioxide	124-38-9	3 - 5

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops or persists.

Skin contact Remove and isolate contaminated clothing and shoes. Wash off with warm water and soap. Get medical attention if irritation develops or persists. For minor skin contact, avoid spreading material on unaffected skin.

Inhalation Move to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician if symptoms develop or persist.

Ingestion

If material is ingested, immediately contact a poison control center. Have victim rinse mouth thoroughly with water. Do not induce vomiting without advice from poison control center. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Notes to physician

In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

5. Fire Fighting Measures

Flammable properties

Runoff to sewer may cause fire or explosion hazard.

Extinguishing media**Suitable extinguishing media**

Water. Water fog. Foam. Dry chemical. Carbon dioxide (CO2).

Protection of firefighters**Specific hazards arising from the chemical**

Fire may produce irritating, corrosive and/or toxic gases.

Protective equipment and precautions for firefighters

In the event of fire and/or explosion do not breathe fumes. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Containers should be cooled with water to prevent vapor pressure build up. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Cool containers with flooding quantities of water until well after fire is out.

6. Accidental Release Measures

Methods for containment

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up

Should not be released into the environment. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly. After removal flush contaminated area thoroughly with water.

7. Handling and Storage

Handling

Pressurized container: Do not pierce or burn, even after use. Do not handle or store near an open flame, heat or other sources of ignition. Do not smoke while using or until sprayed surface is thoroughly dry. Do not use if spray button is missing or defective. Use only with adequate ventilation. Do not get this material in contact with eyes. Do not get this material in contact with skin. Wear personal protective equipment. Avoid prolonged exposure.

Storage

Contents under pressure. Do not puncture, incinerate or crush. The pressure in sealed containers can increase under the influence of heat. Keep away from heat and sources of ignition. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Avoid exposure to long periods of sunlight. Keep out of the reach of children. Level 1 Aerosol (NFPA 30B) Do not store, incinerate, or heat this material above 120 degrees Fahrenheit.

8. Exposure Controls / Personal Protection

Exposure limits**ACGIH****Components****CAS #****TWA****STEL****Ceiling**

Trichloroethylene	79-01-6	10 ppm	25 ppm	Not established
Carbon Dioxide	124-38-9	5000 ppm	30000 ppm	Not established

OSHA**Components****CAS #****TWA****STEL****Ceiling**

Trichloroethylene	79-01-6	100 ppm	Not established	200 ppm
Carbon Dioxide	124-38-9	5000 ppm	Not established	Not established

Personal protective equipment

Eye / face protection	Wear chemical goggles.
Skin protection	Wear appropriate chemical resistant gloves. Wear appropriate chemical resistant clothing.
Respiratory protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

9. Physical & Chemical Properties

Appearance	Compressed liquefied gas.
Boiling point	186.8 °F (86.1 °C) estimated
Color	Colorless.
Density	1.4645 g/cm ³ estimated
Flammability (HOC)	0 kJ/g estimated
Flash back	No
Flash point	None
Form	Liquid. Aerosol.
Freezing point	Not available
Odor	Characteristic.
pH	Not applicable
Physical state	Liquid.
Pressure	72 - 92 psig @70F
Solubility	Negligible
Specific gravity	1.4646 estimated

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	Heat, flames and sparks.
Hazardous decomposition products	Irritants. Toxic gas.

11. Toxicological Information

Acute effects	Acute LC50: 8282 mg/l/4h estimated, Rat, Inhalation	
Component analysis - LD50		
Toxicology Data - Selected LD50s and LC50s		
Trichloroethylene	79-01-6	Inhalation LC50 Rat 8000 ppm 4 h; Inhalation LC50 Rat 26300 ppm 1 h; Oral LD50 Rat 4290 mg/kg; Dermal LD50 Rabbit >20 g/kg
Sensitization	Not expected to be hazardous by OSHA criteria.	
Carcinogenicity	Hazardous by OSHA criteria. Potential cancer hazard.	
IARC - Group 2A (Probably Carcinogenic to Humans)		
Trichloroethylene	79-01-6	Monograph 63 [1995]; Supplement 7 [1987]
Teratogenicity	Not expected to be hazardous by OSHA criteria.	

12. Ecological Information

Ecotoxicity	Components of this product are hazardous to aquatic life.
	LC50 42.13 mg/L, Fish, 96.00 Hours, EC50 2.28 mg/L, Daphnia, 48.00 Hours,

13. Disposal Considerations

Waste codes	D040: Waste Trichloroethylene
Disposal instructions	Contents under pressure. Do not puncture, incinerate or crush. Dispose of this material and its container at hazardous or special waste collection point. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.

14. Transport Information

Department of Transportation (DOT) Requirements

Basic shipping requirements:

Proper shipping name	Consumer commodity
Hazard class	ORM-D
Subsidiary hazard class	None

Additional information:

Packaging exceptions	156, 306
Packaging non bulk	156, 306
Packaging bulk	None

IMDG

Basic shipping requirements:

Proper shipping name	AEROSOLS
Hazard class	2.2
Subsidiary hazard class	6.1
UN number	1950

Additional information:

Packaging exceptions	NOT a Ltd Qty
Item	5T
Labels required	2.2 +6.1

Transport Category If <1L: Consumer Commodity



IATA

Basic shipping requirements:

Proper shipping name	Aerosols, non-flammable, containing substances in Division 6.1, Packing Group III
Hazard class	2.2
Subsidiary hazard class	6.1
UN number	1950

Additional information:

Packaging exceptions	LTD QTY
Labels required	2.2, 6.1



15. Regulatory Information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

Trichloroethylene 79-01-6 0.1 % de minimis concentration

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

CERCLA (Superfund) reportable quantity

Trichloroethylene: 100.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Hazard categories (311/312)
Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - Yes
Reactivity Hazard - No

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations

WARNING: This product contains a chemical known to the State of California to cause cancer.

U.S. - Pennsylvania - RTK (Right to Know) List

Carbon Dioxide	124-38-9	Present
Trichloroethylene	79-01-6	Environmental hazard

16. Other Information**Further information**

HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings

Health: 2*
Flammability: 2
Physical hazard: 0

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Prepared by

Regulatory Compliance