



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Product number** 709  
**Product name** **Electronic Contact Cleaner**  
**Effective date** 13-Nov-2007  
**Company information** Claire Manufacturing  
500 Vista Ave.  
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  
**Supersedes date** 14-Aug-2007

## 2. Hazards Identification

**Emergency overview** FLAMMABLE  
CONTENTS UNDER PRESSURE.  
Aerosol. Pressurized container may explode when exposed to heat or flame. Harmful in contact with eyes. Prolonged exposure may cause chronic effects.

**OSHA regulatory status** This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

**Potential health effects**

**Eyes** Contact may irritate or burn eyes. Eye contact may result in corneal injury.

**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. Prolonged inhalation may be harmful.

**Ingestion** Exposure by ingestion of an aerosol is unlikely. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause delayed lung damage.

**Target organs** Central nervous system. Respiratory system.

**Chronic effects** Conjunctiva. 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.

**Signs and symptoms** Discomfort in the chest. Corneal damage. Narcosis. Conjunctivitis. Defatting of the skin. Irritation.

## 3. Composition / Information on Ingredients

Components	CAS #	Percent
n-Pentane	109-66-0	30 - 40
Isohexane	107-83-5	20 - 30
Cyclohexane	110-82-7	15 - 20
Aliphatic Petroleum Solvent	64742-89-8	3 - 5
Carbon Dioxide	124-38-9	3 - 5
Non-hazardous and other components below reportable levels		2.5 - 10

## 4. First Aid Measures

**First aid procedures**

**Eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

**Skin contact** Wash off with warm water and soap. Get medical attention if irritation develops or persists.

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

**Ingestion**

Have victim rinse mouth thoroughly with water. Get medical attention immediately. Do not induce vomiting without medical advice. 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**

Symptoms may be delayed.

**General advice**

Call a physician if symptoms develop or persist.

## 5. Fire Fighting Measures

**Flammable properties**

Not a fire hazard. The product is not flammable.

**Extinguishing media****Suitable extinguishing media**

Foam. Dry chemical. Carbon dioxide (CO<sub>2</sub>). Do not use water.

**Unsuitable extinguishing media**

Water may be ineffective.

**Protection of firefighters****Protective equipment and precautions for firefighters**

Containers should be cooled with water to prevent vapor pressure build up.

## 6. Accidental Release Measures

**Personal precautions**

Local authorities should be advised if significant spillages cannot be contained. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unnecessary personnel away.

**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.

**Methods for cleaning up**

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

## 7. Handling and Storage

**Handling**

Pressurized container: Do not pierce or burn, even after use. 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. Avoid prolonged exposure.

**Storage**

Level 3 Aerosol.

Contents under pressure. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Avoid exposure to long periods of sunlight. Store in cool place. Keep out of the reach of children. Use care in handling/storage.

## 8. Exposure Controls / Personal Protection

**Exposure limits****ACGIH**

Components	CAS #	TWA	STEL	Ceiling
n-Pentane	109-66-0	600 ppm	Not established	Not established
Isohexane	107-83-5	500 ppm	1000 ppm	Not established
Cyclohexane	110-82-7	100 ppm	Not established	Not established
Carbon Dioxide	124-38-9	5000 ppm	30000 ppm	Not established

**OSHA**

Components	CAS #	TWA	STEL	Ceiling
n-Pentane	109-66-0	1000 ppm	Not established	Not established
Cyclohexane	110-82-7	300 ppm	Not established	Not established
Carbon Dioxide	124-38-9	5000 ppm	Not established	Not established

**Engineering controls**

Ensure adequate ventilation, especially in confined areas.

**Personal protective equipment****Eye / face protection**

Wear chemical goggles.

**Skin protection**

Wear appropriate chemical resistant gloves.

**Respiratory protection**

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**General hygiene considerations** When using do not smoke. Avoid contact with eyes. Avoid contact with skin. Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical & Chemical Properties

<b>Appearance</b>	Compressed liquefied gas.
<b>Color</b>	Clear.
<b>Odor</b>	Characteristic.
<b>Physical state</b>	Liquid.
<b>Form</b>	Aerosol.
<b>Flammability (HOC)</b>	43.3048 kJ/g estimated
<b>Flash back</b>	No
<b>Pressure</b>	55 - 65 psig @ 70F
<b>Solubility</b>	Partially
<b>Flash point</b>	-40F (Concentrate)
<b>Boiling point</b>	141.8 °F (61.1 °C) estimated
<b>Specific gravity</b>	0.6769 estimated
<b>pH</b>	Not applicable

## 10. Chemical Stability & Reactivity Information

<b>Chemical stability</b>	Stable at normal conditions.
<b>Hazardous decomposition products</b>	May include oxides of oxides of carbon.

## 11. Toxicological Information

<b>Acute effects</b>	Acute LD50: 15950 mg/kg estimated, Rat, Oral Acute LD50: 3696 mg/kg estimated, Rat, Dermal Acute LC50: 32 mg/l/4h estimated, Rat, Inhalation
<b>Sensitization</b>	Not expected to be hazardous by OSHA criteria.
<b>Local effects</b>	Contact may irritate or burn eyes. Components of the product may be absorbed into the body through the skin.
<b>Chronic effects</b>	Hazardous by OSHA criteria. Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood. Prolonged or repeated exposure may cause lung injury. Prolonged exposure may cause chronic effects.
<b>Neurological effects</b>	Hazardous by OSHA criteria.
<b>Mutagenicity</b>	Not expected to be hazardous by OSHA criteria.
<b>Reproductive effects</b>	Not expected to be hazardous by OSHA criteria.
<b>Teratogenicity</b>	Not expected to be hazardous by OSHA criteria.
<b>Epidemiology</b>	Hazardous by OSHA criteria.
<b>Further information</b>	Symptoms may be delayed.

## 12. Ecological Information

<b>Ecotoxicity</b>	LC50 13.75 mg/L estimated, Fish, 96.00 Hours, EC50 11.78 mg/L estimated, Daphnia, 48.00 Hours, IC50 2497 mg/L estimated, Algae, 72.00 Hours, Components of this product have been identified as having potential environmental concerns.
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## 13. Disposal Considerations

<b>Disposal instructions</b>	Contents under pressure. Do not puncture, incinerate or crush. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose in accordance with all applicable regulations.
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## 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, flammable
Hazard class	2.1
UN number	1950
Additional information:	
Packaging exceptions	LTD QTY
Item	5F
Labels required	2.1
Transport Category	2



### IATA

#### Basic shipping requirements:

Proper shipping name	Aerosols, flammable
Hazard class	2.1
UN number	1950
Additional information:	
Packaging exceptions	LTD QTY



## 15. Regulatory Information

### US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.  
All components are on the U.S. EPA TSCA Inventory List.

### Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

### CERCLA (Superfund) reportable quantity

Cyclohexane: 1000.0000

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories  
Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - Yes  
Pressure Hazard - Yes  
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

**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)	No
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****U.S. - Pennsylvania - RTK (Right to Know) List**

Carbon Dioxide	124-38-9	Present
Cyclohexane	110-82-7	Environmental hazard
Isohexane	107-83-5	Present
n-Pentane	109-66-0	Present

**16. Other Information****HMIS® ratings**

Health: 1\*  
Flammability: 4  
Physical hazard: 0

**Prepared by**

Regulatory Compliance

**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.

**Issue date**

13-Nov-2007