



CRC® CO® Contact Cleaner, 396 g

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)
Issue date: 2025-04-07 Version: 1.0

SECTION 1: Identification

1.1. Product identifier

Trade name : CRC® CO® Contact Cleaner, 396 g
Product code : 1006114
Part number : 72016

1.2. Recommended use and restrictions on use

Recommended use : Precision electronics cleaner
Restrictions on use : None known

1.3. Supplier

Manufactured or sold by:

CRC Canada Co.
83 Galaxy Blvd.
Unit 35 - 37
Toronto, ON M9W 5X6
Canada
T 416-847-7750
crcindustries.ca

1.4. Emergency telephone number

Emergency number : 800-424-9300 (CHEMTREC)
24-Hour Emergency

SECTION 2: Hazard identification


2.1. Classification of the substance or mixture

Classification (GHS CA)

Aerosol, Category 3	Pressurized container; may burst if heated.
Skin corrosion/irritation, Category 2	Causes skin irritation.
Serious eye damage/eye irritation, Category 2	Causes serious eye irritation.
Specific target organ toxicity – Single exposure, Category 3, Narcosis	May cause drowsiness or dizziness.
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	May cause respiratory irritation.

2.2. GHS Label elements, including precautionary statements

GHS CA labeling

Hazard pictograms (GHS CA) : 

Signal word (GHS CA) : Warning

Hazard statements (GHS CA) : Pressurized container; may burst if heated
Causes skin irritation
Causes serious eye irritation
May cause respiratory irritation
May cause drowsiness or dizziness

Precautionary statements (GHS CA) : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Do not pierce or burn, even after use.

CRC® CO® Contact Cleaner, 396 g

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Avoid breathing vapors, spray, mist.
Use only outdoors or in a well-ventilated area.
Wear protective gloves, eye and face protection.
Wash hands thoroughly after handling.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or a doctor if you feel unwell.
IF ON SKIN: Wash with plenty of water.
If skin irritation occurs: Get medical advice or attention.
Take off contaminated clothing and wash it before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice or attention.
Store in a well-ventilated place.
Store locked up.
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
Dispose of contents/container in accordance with local/regional/national regulations.

2.3. Other hazards

Other hazards which do not result in classification : When exposed to extreme heat or hot surfaces, vapors may decompose to toxic gases such as hydrogen fluoride.

2.4. Unknown acute toxicity (GHS CA)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%
1,1,1,2-Tetrafluoroethane	HFC-134A	CAS-No.: 811-97-2	45 – 70
Ethane, 1,1,2,2-tetrafluoro-1-(2,2,2-trifluoroethoxy)-	HFE-347PCF2	CAS-No.: 406-78-0	45 – 70

Full text of hazard classes and H-statements : see section 16

Comments : The exact percentage (concentration) of composition has been withheld as a trade secret. All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.

First-aid measures after skin contact : Wash skin with soap and water. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

CRC® CO® Contact Cleaner, 396 g

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

First-aid measures general : Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause respiratory irritation. Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination.

Symptoms/effects after skin contact : Causes skin irritation. Redness, pain.

Symptoms/effects after eye contact : Causes serious eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Symptoms/effects after ingestion : May cause irritation to the digestive tract.

4.3. Immediate medical attention and special treatment, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : Water fog. Dry powder. Foam. Carbon dioxide.

5.2. Unsuitable extinguishing media

Unsuitable extinguishing media : Do not use a heavy water stream.

5.3. Specific hazards arising from the hazardous product

Explosion hazard : Pressurized container may rupture when exposed to heat or flame.

Hazardous decomposition products in case of fire : When exposed to extreme heat or hot surfaces, vapors may decompose to toxic gases such as hydrogen fluoride.

5.4. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Eliminate all ignition sources if safe to do so. Fight fire remotely due to the risk of explosion. Do not enter fire area without proper protective equipment, including respiratory protection.

Protection during firefighting : Self-contained breathing apparatus. Do not attempt to take action without suitable protective equipment. Complete protective clothing.

Precautionary measures fire : Keep container tightly closed and away from heat, sparks and flame.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate unnecessary personnel. Stop leak if safe to do so. Eliminate every possible source of ignition. Absorb spillage to prevent material-damage. Notify authorities if product enters sewers or public waters.

Personal Precautions, Protective Equipment and Emergency Procedures : Self-contained breathing apparatus.

6.2. Methods and materials for containment and cleaning up

For containment : Stop leak, if possible without risk. Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for cleaning up : Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal. Clean surface thoroughly to remove residual contamination.

Additional Regulatory Information : Dispose of materials or solid residues at an authorized site.

6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

CRC® CO® Contact Cleaner, 396 g

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Avoid contact with skin and eyes. Avoid breathing vapors, spray, mist. Use only outdoors or in a well-ventilated area. Maintain ventilation during use and until all vapors are gone. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. If you experience any symptoms listed on this label, increase ventilation or leave the area. Wear personal protective equipment. Exposure to high temperature may cause can to burst. For product usage instructions, see the product label.
- Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Level 1 Aerosol. Store in a well-ventilated place. Store locked up. Store in a cool, dry place out of direct sunlight. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ethane, 1,1,2,2-tetrafluoro-1-(2,2,2-trifluoroethoxy)- (406-78-0)	
Occupational Exposure Limit	50 ppm (8-hour TWA) - Manufacturer Recommended Exposure Limit
Occupational Exposure Limit	150 ppm (Ceiling Exposure Limit) - US EPA (Non-emergency)

8.2. Appropriate engineering controls

- Appropriate engineering controls : Provide local exhaust or general room ventilation. Ensure good ventilation of the work station.
- Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:

Nitrile. Fluoroelastomer (FKM)

Eye protection:

Wear safety glasses with side shields (or goggles).

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.

CRC® CO® Contact Cleaner, 396 g

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Colorless
Odor	: Ethereal
Melting point	: -94 °C (-137.2 °F) estimated
Freezing point	: -94 °C (-137.2 °F) estimated
Boiling point	: 56 °C (132.8 °F) estimated
Flammability (solid, gas)	: Not applicable
Explosion limits	: No data available
Flash point	: None (Setaflash)
Auto-ignition temperature	: 590 °C (1094 °F) estimated
Decomposition temperature	: No data available
pH	: No data available
Viscosity, kinematic	: No data available
Solubility	: Water: Insoluble
Partition coefficient n-octanol/water (Log Pow)	: No data available
Vapor pressure	: No data available
Evaporation rate	: Very fast
Density	: No data available
Relative density	: 1.36 estimated
Relative vapor density at 20°C	: No data available
Particle characteristics	: No data available

9.2. Additional Regulatory Information

No additional information available

SECTION 10: Stability and reactivity

Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	: Pressurized container: may burst if heated.
Possibility of hazardous reactions	: May mass explode in fire. Heating may cause a fire or explosion.
Conditions to avoid	: High temperature. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. When exposed to extreme heat or hot surfaces, vapors may decompose to toxic gases such as hydrogen fluoride.
Incompatible materials	: Strong oxidizing agents. Alkali metals. Alkaline earth metals.
Hazardous decomposition products	: Carbon oxides (CO, CO ₂). Carbonyl halogenides. Hydrogen fluoride. Halogenated compounds.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

1,1,1,2-Tetrafluoroethane (811-97-2)

LC50 Inhalation - Rat	359453.1 mg/kg Source: National Library of Medicine
-----------------------	---

Ethane, 1,1,2,2-tetrafluoro-1-(2,2,2-trifluoroethoxy)- (406-78-0)

LD50 oral rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
---------------	---

CRC® CO® Contact Cleaner, 396 g

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Ethane, 1,1,2,2-tetrafluoro-1-(2,2,2-trifluoroethoxy)- (406-78-0)	
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity), Guideline: other:
LC50 Inhalation - Rat	> 24.61879 mg/l air Animal: rat, Animal sex: male, Guideline: other:
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause drowsiness or dizziness. May cause respiratory irritation.
STOT-repeated exposure	: Not classified

1,1,1,2-Tetrafluoroethane (811-97-2)	
NOAEC (inhalation, rat, gas, 90 days)	50000 ppm Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

Ethane, 1,1,2,2-tetrafluoro-1-(2,2,2-trifluoroethoxy)- (406-78-0)	
LOAEC (inhalation, rat, vapor, 90 days)	16.358 mg/l air Animal: rat, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)
NOAEL (oral, rat, 90 days)	1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, vapor, 90 days)	12.2685 mg/l air Animal: rat, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)
Aspiration hazard	: Not classified
Symptoms/effects after inhalation	: May cause respiratory irritation. Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination.
Symptoms/effects after skin contact	: Causes skin irritation. Redness, pain.
Symptoms/effects after eye contact	: Causes serious eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
Symptoms/effects after ingestion	: May cause irritation to the digestive tract.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

1,1,1,2-Tetrafluoroethane (811-97-2)	
LC50 - Fish [1]	450 mg/l Test organisms (species): <i>Oncorhynchus mykiss</i> (previous name: <i>Salmo gairdneri</i>)
EC50 72h - Algae [1]	> 118 mg/l Test organisms (species): <i>Raphidocelis subcapitata</i> (previous names: <i>Pseudokirchneriella subcapitata</i> , <i>Selenastrum capricornutum</i>)
EC50 72h - Algae [2]	> 114 mg/l Test organisms (species): <i>Raphidocelis subcapitata</i> (previous names: <i>Pseudokirchneriella subcapitata</i> , <i>Selenastrum capricornutum</i>)

Ethane, 1,1,2,2-tetrafluoro-1-(2,2,2-trifluoroethoxy)- (406-78-0)	
LC50 - Fish [1]	> 76 mg/l Test organisms (species): <i>Cyprinus carpio</i>

CRC® CO® Contact Cleaner, 396 g

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

Ethane, 1,1,2,2-tetrafluoro-1-(2,2,2-trifluoroethoxy)- (406-78-0)

EC50 72h - Algae [1]	> 24 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	> 213 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)

12.2. Persistence and degradability

CRC® CO® Contact Cleaner, 396 g

Persistence and degradability	No data is available on the degradability of this product.
-------------------------------	--

12.3. Bioaccumulative potential

1,1,1,2-Tetrafluoroethane (811-97-2)

Partition coefficient n-octanol/water (Log Pow)	1.06 Source: International Chemical Safety Cards
---	--

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified

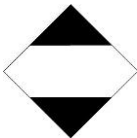
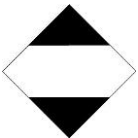

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional waste regulation	: Dispose of contents/container in accordance with local/regional/national regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Do not allow to enter sewers, surface or groundwater.
Product/Packaging disposal recommendations	: Contents under pressure. Empty containers should be taken for recycling, recovery or waste in accordance with local regulation.
Additional information	: Do not re-use empty containers.

SECTION 14: Transport information

In accordance with TDG / IMDG / IATA

TDG	IMDG	IATA
14.1. UN number		
UN1950	1950	1950
14.2. Proper Shipping Name		
AEROSOLS (Limited quantity)	AEROSOLS (Limited quantity)	Aerosols, non-flammable (Limited quantity)
14.3. Transport hazard class(es)		
LTD QTY	LTD QTY	LTD QTY
		

CRC® CO® Contact Cleaner, 396 g

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

TDG	IMDG	IATA
14.4. Packing group		
Not applicable	Not applicable	Not applicable
14.5. Environmental hazards		
No supplementary information available		

14.6. Special precautions for user

TDG

TDG Primary Hazard Classes	: 2.2 - Class 2.2 - Non-Flammable, Non-Toxic Gases
UN-No. (TDG)	: UN1950
TDG Special Provisions	: 80 - Despite section 1.17 of Part 1 (Coming into Force, Repeal, Interpretation, General Provisions and Special Cases), a person must not offer for transport or transport these dangerous goods unless they are in a means of containment that is in compliance with the requirements for transporting gases in Part 5 (Means of Containment), 107 - (1) These Regulations, except for Parts 1 and 2, do not apply to the offering for transport, handling or transport of UN1950, AEROSOLS, and UN2037, GAS CARTRIDGES, that contain dangerous goods included in Class 2.1 or Class 2.2 and that are transported on a road vehicle, a railway vehicle or a vessel on a domestic voyage, if the aerosols or gas cartridges have a capacity less than or equal to 50 mL. (2) Subsection (1) does not apply to self-defence spray.
Explosive Limit and Limited Quantity Index	: 1 L
Excepted quantities (TDG)	: E0
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	: 75 L
Emergency Response Guide (ERG) Number	: 126

IMDG

Class (IMDG)	: 2.2 - Non-flammable, non-toxic gases
Special provision (IMDG)	: 63, 190, 277, 327, 344, 381, 959
Limited quantities (IMDG)	: SP277
Excepted quantities (IMDG)	: E0
Packing instructions (IMDG)	: P207, LP200
Packing provisions (IMDG)	: PP87, L2
EmS-No. (Fire)	: F-D - FIRE SCHEDULE Delta - FLAMMABLE GASES
EmS-No. (Spillage)	: S-U - SPILLAGE SCHEDULE Uniform - GASES (FLAMMABLE, TOXIC OR CORROSIVE)
Stowage category (IMDG)	: None
Stowage and handling (IMDG)	: SW1, SW22
Segregation (IMDG)	: SG69

IATA

Class (IATA)	: 2.2 - Gases : Non-flammable, Non-toxic
PCA Excepted quantities (IATA)	: E0
PCA Limited quantities (IATA)	: Y203
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 203
PCA max net quantity (IATA)	: 75kg
CAO packing instructions (IATA)	: 203
CAO max net quantity (IATA)	: 150kg
Special provision (IATA)	: A98, A145, A167, A802
ERG code (IATA)	: 2L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

CRC® CO® Contact Cleaner, 396 g

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

SECTION 15: Regulatory information

15.1. National regulations

CRC® CO® Contact Cleaner, 396 g

All components of this product are listed on the DSL, NDSL, or are exempt from the inventory requirements.

Name	CAS-No.	Regulatory reference
1,1,1,2-Tetrafluoroethane	811-97-2	Listed on the Canadian DSL (Domestic Substances List)
Ethane, 1,1,2,2-tetrafluoro-1-(2,2,2-trifluoroethoxy)-	406-78-0	Listed on the Canadian DSL (Domestic Substances List)

15.2. International regulations

1,1,1,2-Tetrafluoroethane (811-97-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Ethane, 1,1,2,2-tetrafluoro-1-(2,2,2-trifluoroethoxy)- (406-78-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.2. Other Regulatory Information

Volatile Organic Compound Concentration Limits for Certain Products Regulations: SOR/2021-268

VOC content	50.25 %
Product Category	Electronics cleaner that is designed to remove dirt, dust, moisture, flux or oxides from the internal components of electronic or precision equipment (such as circuit boards) or the internal components of electronic devices (such as radios, compact disc players, digital video disc players or computers)

SECTION 16: Other information

Issue date	: 04-07-2025
Other information	: CRC # 1753488.
Author	Joshua Weir

Safety Data Sheet (SDS), Canada, CRC

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC's knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Canada Co.