Section 1: Product & Company Identification

Product Name: Cable Clean® RD™ (aerosol)

Product Number (s): 02150

Product Use: Cable cleaner

Manufacturer / Supplier Contact Information:

In United States:In Canada:CRC Industries, Inc.CRC Canada Co.885 Louis Drive2-1246 Lorimar Drive

Warminster, PA 18974 Mississauga, Ontario L5S 1R2

(800) 521-3168 (Technical)

(800) 272-4620 (Customer Service)

In Mexico:

CRC Industries Mexico Av. Benito Juárez 4055 G

Colonia Orquídea

San Luís Potosí, SLP CP 78394

www.crc-mexico.com 52-444-824-1666

24-Hr Emergency – CHEMTREC: (800) 424-9300 or (703) 527-3887

Section 2: Hazards Identification

Emergency Overview

DANGER: Vapor Harmful. Contents Under Pressure.

Appearance & Odor: Colorless liquid, irritating odor at high concentrations.

Potential Health Effects:

ACUTE EFFECTS:

EYE: May cause slight temporary eye irritation. Vapors may irritate the eyes at concentrations of 100 ppm.

SKIN: Short single exposure may cause skin irritation. Prolonged exposure may cause severe skin irritation,

even a burn. A single prolonged exposure is not likely to result in the material being absorbed through

skin in harmful amounts.

INHALATION: Dizziness may occur at concentrations of 200 ppm. Progressively higher levels may also cause nasal

irritation, nausea, incoordination, and drunkenness. Very high levels or prolonged exposure could lead

to unconsciousness and death.

INGESTION: Single dose oral toxicity is considered to be extremely low. Swallowing large amounts may cause

injury if aspirated into the lungs. This may be rapidly absorbed through the lungs and result in injury to

other body systems.

CHRONIC EFFECTS: Repeated contact with skin may cause drying or flaking of skin. Excessive or long term

exposure to vapors may increase sensitivity to epinephrine and increase myocardial irritability.

TARGET ORGANS: Central nervous system. Possibly liver and kidney.

Medical Conditions Aggravated by Exposure: None known

See Section 11 for toxicology and carcinogenicity information on product ingredients.

Section 3: Composition/Information on Ingredients

| COMPONENT | CAS NUMBER | % by Wt. | |
|----------------------------|------------|----------|--|
| Tetrachloroethylene (PERC) | 127-18-4 | > 95 | |
| 1-Bromopropane (nPB) | 106-94-5 | 1 - 3 | |
| Carbon Dioxide | 124-38-9 | 1 - 3 | |

Section 4: First Aid Measures

Eye Contact: Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.

Skin Contact: Remove contaminated clothing and wash affected area with soap and water. Call a physician if

irritation persists. Wash contaminated clothing prior to re-use.

Inhalation: Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If

breathing is difficult give oxygen. Call a physician.

Ingestion: Do NOT induce vomiting. Call a physician immediately.

Note to Physicians: Because rapid absorption may occur through lungs if aspirated and cause systemic effects, the

decision of whether to induce vomiting or not should be made by a physician. If lavage is performed, suggest endotracheal and/or esophageal control. If burn is present, treat as any thermal burn, after decontamination. Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary. No specific antidote.

Section 5: Fire-Fighting Measures

Flammable Properties: This product is nonflammable in accordance with aerosol flammability definitions.

See(16 CFR 1500.3(c)(6))

Flash Point: None (TCC)

Autoignition Temperature: None

Upper Explosive Limit: None
Lower Explosive Limit: None

Fire and Explosion Data:

Suitable Extinguishing Media: This material does not burn. Use extinguishing agent suitable for surrounding fire.

Products of Combustion: Hydrogen chloride. Trace amounts of phosgene, and chlorine.

Explosion Hazards: Aerosol containers, when exposed to heat from fire, may build pressure and explode.

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for

protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water spray to keep fire-exposed containers cool

and to knock down vapors which may result from product decomposition.

Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8. Do not breathe vapors.

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush into

sewers or storm drains.

Methods for Containment & Clean-up: Dike area to contain spill. Ventilate the area with fresh air. If in confined space

or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

Section 7: Handling and Storage

Handling Procedures: Vapors of this product are heavier than air and will collect in low areas. Make sure ventilation

removes vapors from low areas. Do not eat, drink or smoke while using this product. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. For

product use instructions, please see the product label.

Storage Procedures: Store in a cool dry area out of direct sunlight. Aerosol cans must be maintained below 120°F /

49°C to prevent cans from rupturing.

Aerosol Storage Level: I

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines:

| | OSHA | | ACGIH | | OTHER | | |
|------------------------|------|--------------|---------|--------|------------|--------|------|
| COMPONENT | TWA | STEL | TWA | STEL | TWA | SOURCE | UNIT |
| | | | | | | | |
| Tetrachloroethylene | 100 | N.E. | 25 | 100 | N.E. | | ppm |
| 1-Bromopropane | N.E. | N.E. | 10 | N.E. | N.E. | | ppm |
| Carbon dioxide | 5000 | 30000 (v) | 5000 | 30,000 | N.E. | | ppm |
| N.E. – Not Established | | (c) – ceilin | g (s) - | - skin | (v) – vaca | ited | |

Controls and Protection:

Engineering Controls: Area should have ventilation to provide fresh air. Local exhaust ventilation is generally

preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA

regulations.

Respiratory Protection: None required for normal work where adequate ventilation is provided. If engineering controls

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

for emergencies.

Eye/face Protection: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid

contact, wear splash-proof goggles.

Skin Protection: Use protective gloves such as PVA, Teflon, or Viton. Also, use full protective clothing if there is

prolonged or repeated contact of liquid with skin.

Section 9: Physical and Chemical Properties

Physical State: liquid Color: colorless Odor: irritating odor Odor Threshold: ND

Specific Gravity: 1.62

Initial Boiling Point: 250°F / 131°C

Freezing Point: ND

Vapor Pressure: 13 mmHg @ 68°F / 20°C (air = 1)Vapor Density: 5.76 **Evaporation Rate:** > 1 (ether = 1)

negligible in water Solubility:

Coefficient of water/oil distribution: ND

pH:

Volatile Organic Compounds: wt %: 2 g/L: 32.9 lbs./gal: 0.27

Section 10: Stability and Reactivity

Stability: Stable

Conditions to Avoid: Avoid direct sunlight or ultraviolet sources. Avoid open flames, welding arcs, and other high

temperature sources which induce thermal decomposition.

Incompatible Materials: Avoid contact with metals such as: aluminum powders, magnesium powders, potassium,

sodium, and zinc powder. Avoid unintended contact with amines. Avoid contact with strong

bases and strong oxidizers.

Hazardous Decomposition Products: Hydrogen chloride, trace amounts of chlorine and phosgene

Possibility of Hazardous Reactions: No

Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

Acute Toxicity:

| <u>Component</u> | Oral LD50 (rat) | Dermal LD50 (rabbit) | Inhalation LC50 (rat) |
|---------------------|-----------------|----------------------|---------------------------|
| Tetrachloroethylene | 2629 mg/kg | > 10 g/kg | 5200 mg/kg/4H |
| 1-Bromopropane | 4260 mg/kg | No data | 253 g/m ³ /30M |
| Carbon dioxide | No data | No data | 470,000 ppm/30M |

Chronic Toxicity:

| | OSHA | IARC | NTP | | | |
|---------------------|-------------------|---------------------------------------|-------------------|-----------------|------------|--|
| Component | <u>Carcinogen</u> | <u>Carcinogen</u> | <u>Carcinogen</u> | <u>Irritant</u> | Sensitizer | |
| Tetrachloroethylene | No | No Group 2A Reasonably Anticipated to | | E (mild) / | No | |
| | 110 | 0.00p 27 t | be a Carcinogen | S (severe) | | |
| 1-Bromopropane | No | No | No | E, S, R | Unknown | |
| | | | | (mild) | | |
| Carbon dioxide | No | No | No | No | No | |

E – Eye S – Skin R - Respiratory

No information available Reproductive Toxicity: No information available Teratogenicity:

In vitro studies were negative. Mutagenicity: tetrachloroethylene Animal studies were negative

Synergistic Effects: No information available

Section 12: Ecological Information

Ecological studies have not been conducted for this product. The following information is available for components of this product.

Ecotoxicity: Tetrachloroethylene -- 96 Hr LC50 Rainbow Trout: 5.28 mg/L (static)

96 Hr LC50 Fathead minnow: 13.4 mg/L (flow-through)

Persistence / Degradability: Biodegradation under aerobic conditions is below detectable limits.

Biodegradation may occur under anaerobic conditions. Biodegradation rate may

increase in soil and/or water with acclimation.

Bioaccumulation / Accumulation: Bioconcentration potential is low (BCF less than 100).

Mobility in Environment: Potential for mobility in soil is medium.

Section 13: Disposal Considerations

Waste Classification: The dispensed liquid product is a RCRA hazardous waste of toxicity with the following potential

waste codes: U210, F001, F002, D039. (See 40 CFR Part 261.20 – 261.33)

Empty aerosol containers may be recycled. Any liquid product should be managed as a

hazardous waste.

All disposal activities must comply with federal, state, provincial and local regulations. Local regulations may be more stringent than state, provincial or national requirements.

Section 14: Transport Information

US DOT (ground): UN1950, Aerosols, nonflammable, 2.2 (6.1), Limited Quantity**

ICAO/IATA (air): UN1950, Aerosols, nonflammable, containing substances in Division 6.1, Packing Group III, 2.2

(6.1), Limited Quantity

IMO/IMDG (water): UN1950, Aerosols, 2.2 (6.1)

Special Provisions: Marine pollutant

**This product can be classified and labeled as 'Consumer Commodity, ORM-D' for domestic

ground shipping until January 1, 2014.

If shipping as limited quantity by ground, note that shipping papers are not required.

Section 15: Regulatory Information

U.S. Federal Regulations:

Toxic Substances Control Act (TSCA):

All ingredients are either listed on the TSCA inventory or are exempt.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Reportable Quantities (RQ's) exist for the following ingredients: Tetrachloroethylene (100 lbs)

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Superfund Amendments Reauthorization Act (SARA) Title III:

Section 302 Extremely Hazardous Substances (EHS): None

Section 311/312 Hazard Categories: Fire Hazard No

Reactive Hazard No Release of Pressure Yes Acute Health Hazard Yes Chronic Health Hazard Yes

Section 313 Toxic Chemicals: This product contains the following substances 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: tetrachloroethylene (97.7%)

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs): tetrachloroethylene

Occupational Safety and Health Administration:

This product is regulated by the Hazard Communications Standard.

U.S. State Regulations:

California Safe Drinking Water and Toxic Enforcement Act (Prop 65):

This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm:

Tetrachloroethylene 1-Bromopropane

<u>Consumer Products VOC Regulations</u>: This product is not regulated.

State Right to Know:

New Jersey: 127-18-4, 124-38-9, 106-88-7

Pennsylvania: 127-18-4, 106-94-5, 124-38-9, 106-88-7, 75-65-0

Massachusetts: 127-18-4, 106-94-5, 124-38-9 Rhode Island: 127-18-4, 124-38-9, 106-88-7

Canadian Regulations:

Controlled Products Regulations:

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulation and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Hazard Class: A, D1B, D2A, D2B

<u>Canadian DSL Inventory</u>: All ingredients are either listed on the DSL Inventory or are exempt.

European Union Regulations:

RoHS Compliance: This product is compliant with Directive 2002/95/EC of the European Parliament and of the

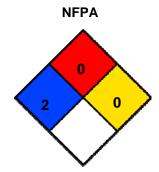
Council of 27 January 2003. This product does not contain any of the restricted substances as

listed in Article 4(1) of the RoHS Directive.

Additional Regulatory Information: None

Section 16: Other Information

| HMIS® (II) | | |
|---------------|---|--|
| Health: | 2 | |
| Flammability: | 0 | |
| Reactivity: | 0 | |
| PPE: | В | |



Ratings range from 0 (no hazard) to 4 (severe hazard)

Prepared By: Michelle Rudnick

CRC #: 474B/C Revision Date: 08/01/2012

Changes since last revision: Section 14: Transport Information

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 Industries' 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 MSDS consult your supervisor, a health & safety professional, or CRC Industries.

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstract Service
CFR: Code of Federal Regulations
DOT: Department of Transportation
DSL: Domestic Substance List

g/L: grams per Liter

HMIS: Hazardous Materials Identification System
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
IMDG: International Maritime Dangerous Goods

lbs./gal: pounds per gallon LC: Lethal Concentration

LD: Lethal Dose NA: Not Applicable

ND: Not Determined

NIOSH: National Institute of Occupational Safety & Health

NFPA: National Fire Protection Association

NTP: National Toxicology Program

OSHA: Occupational Safety and Health Administration

PMCC: Pensky-Martens Closed Cup PPE: Personal Protection Equipment

ppm: Parts per Million

RoHS: Restriction of Hazardous Substances

STEL: Short Term Exposure Limit

IMO: International Maritime Organization

TCC: Tag Closed Cup

TWA: Time Weighted Average

WHMIS: Workplace Hazardous Materials Information System