SAFETY DATA SHEET

1. Identification

Product identifier **Cable Clean® RD™**

Other means of identification

Product Code No. 02150 (Item# 1003230)

Recommended use Cable cleaner

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufactured or sold by:

Company name CRC Industries, Inc.

Address 885 Louis Dr.
Warminster, PA 18974 US

Telephone

General Information 215-674-4300

Technical Assistance 800-521-3168

Customer Service 800-272-4620

24-Hour Emergency (CHEMTREC) 800-424-9300 (US)
703-527-3887 (International)

Website www.crcindustries.com

2. Hazard(s) identification

Physical hazards	Gases under pressure	Compressed gas
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2
	Carcinogenicity	Category 1B
	Reproductive toxicity	Category 1B
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 2 (kidney, liver, nervous system)
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 2
OSHA defined hazards	Not classified.	

Label elements

Signal word Danger

Hazard statement Contains gas under pressure; may explode if heated. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. May cause cancer. May damage fertility or the unborn child. May cause damage to organs (kidney, liver, nervous system) through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not puncture or incinerate container. Do not expose to heat or store at temperatures above 49°C/120°F. Use with adequate ventilation. 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. Do not breathe mist or vapor. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Avoid release to the environment.
Response	If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. 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/attention. Collect spillage.
Storage	Store locked up. Protect from sunlight. Store in a well-ventilated place. Exposure to high temperature may cause can to burst.
Disposal	Dispose of contents/container in accordance with local/regional/national regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information

When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen bromide, hydrogen chloride and possibly phosgene.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
tetrachloroethylene	perchloroethylene	127-18-4	90 - 100
carbon dioxide		124-38-9	1 - 3
n-propyl bromide	1-bromopropane	106-94-5	1 - 3

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Remove contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
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 and persists.
Ingestion	Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately. Do not induce vomiting without advice from poison control center.
Most important symptoms/effects, acute and delayed	May cause drowsiness and dizziness. Narcosis. Headache. Nausea, vomiting. Behavioral changes. Decrease in motor functions. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Edema. Jaundice. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO_2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical	Pressurized container may rupture when exposed to heat or flame. During fire, gases hazardous to health may be formed. When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen bromide, hydrogen chloride and possibly phosgene.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up.
General fire hazards	Contents under pressure. Pressurized container may rupture when exposed to heat or flame.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water. Prevent product from entering drains. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. 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. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices. For product usage instructions, see the product label.
Conditions for safe storage, including any incompatibilities	Level 1 Aerosol. Contents under pressure. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Components

Type	Value
carbon dioxide (CAS 124-38-9) PEL	9000 mg/m 3 5000 ppm

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value

tetrachloroethylene (CAS 127-18-4)	Ceiling	200 ppm
	TWA	100 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
carbon dioxide (CAS 124-38-9)	STEL	30000 ppm
	TWA	5000 ppm
n-propyl bromide (CAS 106-94-5)	TWA	0.1 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
tetrachloroethylene (CAS 127-18-4)	STEL	100 ppm
	TWA	25 ppm

US. NIOSH: Pocket Guide to Chemical Haz ards

Components	Type	Value
carbon dioxide (CAS 124-38-9)	STEL	54000 mg/m 3 30000 ppm
	TWA	9000 mg/m 3 5000 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
tetrachloroethylene (CAS 127-18-4)	0.5 mg/l	Tetrachloroethylene	Blood	*
	3 ppm	Tetrachloroethylene	End-exhaled air	*

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

n-propyl bromide (CAS 106-94-5) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

tetrachloroethylene (CAS 127-18-4) Skin designation applies.

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear protective gloves such as: Viton/butyl. Polyvinyl alcohol (PVA).

Other Wear appropriate chemical resistant clothing.

Respiratory protection Use a NIOSH-approved cartridge respirator with an organic vapor cartridge unless exposure is below the TLV. Air monitoring is needed to determine actual employee exposure levels. Use a self-contained breathing apparatus in confined spaces and for emergencies.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations	Observe any medical surveillance requirements. 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.

9. Physical and chemical properties

Appearance

Physical state	Liquid.
Form	Aerosol.
Color	Colorless.
Odor	Irritating.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	-8.1 °F (-22.3 °C) estimated
Initial boiling point and boiling range	250.3 °F (121.3 °C) estimated
Flash point	None (Tag Closed Cup)

Evaporation rate Fast.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)	3.8 % estimated **(**
Flammability limit - upper (%)	9.5 % estimated **(**

Vapor pressure 1278.5 hPa estimated

Vapor density 5.76 (air = 1)

Relative density 1.61 estimated **Solubility (water)**

Negligible.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature	Not available.
Decomposition temperature	Not available.

Viscosity (kinematic) Not available.

Percent volatile 97.8 % estimated

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous No dangerous reaction known under conditions of normal use. **reactions**

Conditions to avoid	Heat, flames and sparks. Contact with incompatible materials. When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen bromide, hydrogen chloride and possibly phosgene.
Incompatible materials	Acids. Bases. Strong oxidizing agents. Powdered metal. Sodium. Amines. Oxygen. Peroxide.
Hazardous decomposition	Hydrogen chloride. Hydrogen bromide. Chlorine. Phosgene. Carbon oxides. **products**

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
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.

Symptoms related to the physical, chemical and toxicological characteristics May cause drowsiness and dizziness. Narcosis. Headache. Nausea, vomiting. Behavioral changes. Decrease in motor functions. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Irritation of nose and throat. Skin irritation. May cause redness and pain. Edema. Jaundice.

Information on toxicological effects

Acute toxicity Narcotic effects.

Components	Species	Test Results
n-propyl bromide (CAS 106-94-5)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	14374 ppm, 4 hours
Oral		
LD50 Rat 4260 mg/kg		

Components	Species	Test Results
tetrachloroethylene (CAS 127-18-4)		
Acute		
Dermal		
LD50	Rabbit	> 3228 mg/kg
Oral		
LD50	Rat	2629 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious eye irritation.

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

n-propyl bromide (CAS 106-94-5) 2 B Possibly carcinogenic to humans.
tetrachloroethylene (CAS 127-18-4) 2 A Probably carcinogenic to humans. **OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**
Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens n-propyl bromide (CAS 106-94-5)
Reasonably Anticipated to be a Human Carcinogen.
tetrachloroethylene (CAS 127-18-4) Reasonably Anticipated to be a Human Carcinogen.

Reproductive toxicity May damage fertility or the unborn child.

Specific target organ toxicity - single exposure May cause drowsiness and dizziness.

Specific target organ toxicity - repeated exposure May cause damage to organs (kidney, liver, nervous system) through prolonged or repeated exposure.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. May cause damage to organs through prolonged or repeated exposure.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

Components	Species	Test Results

n-propyl bromide (CAS 106-94-5)

Aquatic

Fish LC50	Fathead minnow (Pimephales promelas) 67.3 mg/l, 96 hours

tetrachloroethylene (CAS 127-18-4)

Aquatic

Fish LC50	Rainbow trout,donaldson trout 4.73 - 5.27 mg/l, 96 hours (Oncorhynchus mykiss)

* Estimates for product may be based on additional component data not shown.

Persistence and degradability

Hydrolysis

Half-life (Hydrolysis)

n-propyl bromide	26 days

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

n-propyl bromide	2.1
tetrachloroethylene	2.88

Bioconcentration factor (BCF)

n-propyl bromide 23

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal of waste from residues / unused products This material and its container must be disposed of as hazardous waste. Contents under pressure. Do not puncture, incinerate or crush. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose in accordance with all applicable regulations.

Hazardous waste code F001: Waste Tetrachloroethylene - Spent halogenated solvent used in degreasing
F002: Waste Tetrachloroethylene - Spent halogenated solvent
D039: Waste Tetrachloroethylene

US RCRA Hazardous Waste U List: Reference

tetrachloroethylene (CAS 127-18-4) U210

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN number UN1950

UN proper shipping name Aerosols, poison, (each not exceeding 1 L capacity), Limited Quantity

Transport hazard class(es)

Class 2.2

Subsidiary risk 6.1(PGIII)

Label(s) 2.2 , 6.1

Packing group Not applicable.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Packaging exceptions 306

Packaging non bulk None

Packaging bulk None

IATA

UN number UN1950

UN proper shipping name Aerosols, non-flammable, containing substances in Division 6.1, Packing Group III

Transport hazard class(es)

Class 2.2

Subsidiary risk 6.1(PGIII) **Packing group** Not applicable.

ERG Code 2 P

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft Allowed with restrictions.

Cargo aircraft only Allowed with restrictions.

IMDG

UN number UN1950

UN proper shipping name AEROSOLS

Transport hazard class(es)

Class 2

Subsidiary risk 6.1(PGIII) **Packing group** Not applicable.

Environmental hazards

Marine pollutant No.

EmS Not available.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

15. Regulatory information

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

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

n-propyl bromide (CAS 106-94-5) tetrachloroethylene (CAS 127-18-4)

CERCLA Hazardous Substance List (40 CFR 302.4)

tetrachloroethylene (CAS 127-18-4) Listed.

CERCLA Hazardous Substances: Reportable quantity

tetrachloroethylene (CAS 127-18-4) 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.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

tetrachloroethylene (CAS 127-18-4)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

SARA 302 Extremely hazardous substance No

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a)) n-propyl bromide (CAS 106-94-5)
tetrachloroethylene (CAS 127-18-4)

US. New Jersey Worker and Community Right-to-Know Act
carbon dioxide (CAS 124-38-9) n-propyl bromide (CAS 106-94-5) tetrachloroethylene (CAS 127-18-4)

US. Massachusetts RTK - Substance List
carbon dioxide (CAS 124-38-9) n-propyl bromide (CAS 106-94-5)
tetrachloroethylene (CAS 127-18-4)

US. Pennsylvania Worker and Community Right-to-Know Law
carbon dioxide (CAS 124-38-9) n-propyl bromide (CAS 106-94-5) tetrachloroethylene (CAS 127-18-4)

US. Rhode Island RTK carbon dioxide (CAS 124-38-9) tetrachloroethylene (CAS 127-18-4)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

n-propyl bromide (CAS 106-94-5)	Listed: August 5, 2016
tetrachloroethylene (CAS 127-18-4)	Listed: April 1, 1988

US - California Proposition 65 - CRT: Listed date/Developmental toxin

n-propyl bromide (CAS 106-94-5)	Listed: December 7, 2004

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

isopropyl bromide (CAS 75-26-3) Listed: May 31, 2005

n-propyl bromide (CAS 106-94-5) Listed: December 7, 2004

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

isopropyl bromide (CAS 75-26-3) Listed: May 31, 2005 n-propyl bromide (CAS 106-94-5) Listed: December 7, 2004

Volatile organic compounds (VOC) regulations

EPA

VOC content (40 CFR 51.100(s)) 2 %

Consumer products (40 CFR 59, Subpt. C) Not regulated

State

Consumer products This product is regulated as a Single Purpose Degreaser. This product is not compliant to be sold for use in California. This product is compliant in all other states.

VOC content (CA) 2 %

VOC content (OTC) 2 %

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (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
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	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)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 10-27-2014

Revision date 09-13-2017

Prepared by Allison Yoon

Version # 05

Further information CRC # 474B-C/1002470-1002472

HMIS® ratings Health: 2*
Flammability: 0
Physical hazard: 0
Personal protection: B

NFPA ratings Health: 2
Flammability: 0
Instability: 0

NFPA ratings

Disclaimer

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 Industries, Inc..

Revision Information

Product and Company Identification: Product Codes
Hazard(s) identification: Hazard statement
Composition/information on ingredients: Component information
Handling and storage: Precautions for safe handling
Exposure controls/personal protection: Hand protection
Toxicological Information: Toxicological Data
Regulatory information: Consumer products
Other information, including date of preparation or last revision: Further information
GHS: Classification