



CHEMICAL PRODUCT SAFETY DATA SHEET

Prepared in accordance with GB/T 16483 and GB/T 17519.

1. Chemical product and company identification

Product name	Cable Clean® RD™
Product code	02150, PR02150
Company name	CRC Industries, Inc.
Address	885 Louis Dr. Warminster, PA 18974 US
Telephone	
General Information	1-215-674-4300
Technical Assistance	1-800-521-3168
Customer Service	1-800-272-4620
24-Hour Emergency (CHEMTREC)	+86 532 83889090 (China) 1-703-527-3887 (International)
Website	www.crcindustries.com

Recommended use and Limitations on use

Recommended use	Cable cleaner
Issue date	11-04-2014
Supersedes date	10-29-2014

2. Hazards identification

Emergency overview	Pressurized container may explode when exposed to heat or flame. May damage fertility or the unborn child. May be harmful in contact with skin. May be harmful if swallowed. Causes skin irritation. May cause cancer. May cause drowsiness and dizziness. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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GHS-classification

Physical hazards	Aerosols	Category 3
Health hazards	Acute toxicity, oral	Category 5
	Acute toxicity, dermal	Category 5
	Skin corrosion/irritation	Category 2
	Carcinogenicity	Category 1
	Reproductive toxicity	Category 1
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 2 (Blood, Nervous system)
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 2
Other hazards which do not result in classification	Not classified.	

Label elements

Pictograms



GHS-labeling

Signal word	Danger
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Hazard statement	Pressurized container: May burst if heated. May be harmful if swallowed. May be harmful in contact with skin. Causes skin irritation. May cause cancer. May damage fertility or the unborn child. May cause drowsiness or dizziness. May cause damage to organs (Nervous system, Blood) through prolonged or repeated exposure. Toxic to aquatic life. 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. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Do not pierce or burn, even after use. Do not breathe gas, mist or vapor. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.
Response	If on skin: Wash with plenty of water. Specific treatment (see this label). 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 exposed or concerned: Get medical advice/attention. Collect spillage.
Storage	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Physical and chemical hazards	Pressurized container: May burst if heated.
Health hazards	May be harmful if absorbed through skin. May be harmful if swallowed. Causes skin irritation. May cause cancer. May damage fertility or the unborn child. May cause drowsiness and dizziness. May cause damage to organs (Nervous System, Blood) through prolonged or repeated exposure.
Environmental hazards	Toxic to aquatic life with long lasting effects.
Supplemental information	
	When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen chloride and possibly phosgene.

3. Composition/information on ingredients

Substance/mixture	Mixture		
Chemical name		CAS Number	Concentration (%)
Tetrachloroethylene		127-18-4	90 - 100
Carbon dioxide		124-38-9	1 - 3
n-Propyl bromide		106-94-5	1 - 3

4. First aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. 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	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	In the unlikely event of swallowing contact a physician or poison control center. Rinse mouth. Do not induce vomiting. Never give anything by mouth to a victim who is unconscious or is having convulsions. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention if symptoms occur.
Most important symptoms and health effects	Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.
Expected acute symptoms and delayed symptoms	Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.
Personal protection for first-aid responders	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.
Notes to physician	Provide general supportive measures and treat symptomatically. Symptoms may be delayed. Keep victim under observation.

5. Fire-fighting measures

Extinguishing media	Use fire-extinguishing media appropriate for surrounding materials. Dry chemical, CO ₂ , or water spray.
Extinguishing media to avoid	Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards	Pressurized container may rupture when exposed to heat or flame. When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen chloride and possibly phosgene.
Special fire fighting procedures	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.
Protection of fire-fighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Avoid breathing gas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
For emergency responders	Wear appropriate protective equipment and clothing during clean-up. Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

Environmental precautions	Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Avoid release to the environment.
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Clean-up methods and materials and containment measures	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways. Stop the flow of material, if this is without risk. Collect spillage. Prevent entry into waterways, sewer, basements or confined areas. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.
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Prevention of secondary hazards	Not assigned.
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7. Handling and storage

Handling	Pressurized container: Do not pierce or burn, even after use. 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 use if spray button is missing or defective. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Static electricity and formation of sparks must be prevented. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Do not breathe gas, fumes, or vapor. Avoid contact with eyes, skin, and clothing. Pregnant or breastfeeding women must not handle this product. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid release to the environment. Do not empty into drains.
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Storage	Level 1 Aerosol.
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Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not handle or store near an open flame, heat or other sources of ignition. Do not puncture, incinerate or crush. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Exposure limits

China

Components	Type	Value
Carbon dioxide (CAS 124-38-9)	STEL	18000 mg/m ³
	TWA	9000 mg/m ³
Tetrachloroethylene (CAS 127-18-4)	TWA	200 mg/m ³

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Tetrachloroethylene (CAS 127-18-4)	0.5 mg/l	Tetrachloroethylene	Blood	*

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
	3 ppm	Tetrachloroethylene	End-exhaled air	*

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

Engineering measures

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. Eye wash facilities and emergency shower must be available when handling this product.

Personal protective equipment**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.

Hand protection

Wear protective gloves such as: Viton®, Polyvinyl alcohol (PVA). Silver Shield®

Eye protection

Wear safety glasses with side shields (or goggles).

Skin and body protection

Use of an impervious apron is recommended. Wear appropriate chemical resistant clothing.

Hygiene measures

When using do not smoke. 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

Liquid.

Color

Colorless.

Odor

Irritating.

pH

Not available.

Melting point/freezing point

-8.1 °F (-22.3 °C) estimated

Boiling point, initial boiling point, and boiling range

159.8 °F (71 °C) estimated

Flash point

None (Tag Closed Cup)

Flammability limit - lower (%)

3.8 % estimated

Flammability limit - upper (%)

7.5 % estimated

Explosive limit - lower (%)

Not available.

Explosive limit - upper (%)

Not available.

Vapor pressure

1266.2 hPa estimated

Vapor density

5.76 (air = 1)

Relative density

1.61 estimated

Density

Not available.

Solubility(ies)**Solubility (water)**

Negligible.

Partition coefficient (n-octanol/water)

Not available.

Auto-ignition temperature

914 °F (490 °C) estimated

Decomposition temperature

Not available.

Evaporation rate

Fast.

10. Stability and reactivity**Stability**

Material is stable under normal conditions.

Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid	When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen chloride and possibly phosgene. Heat, flames and sparks. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Hydrogen chloride. Nitrogen oxides (NOx). Phosgene.

11. Toxicological information

Acute toxicity Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. May be harmful if swallowed. May be harmful in contact with skin. May cause allergic skin reaction.

Product	Species	Test Results
Cable Clean® RD™		
Acute		
<i>Dermal</i>		
LD50	Rabbit	3259.8604 mg/kg estimated
<i>Inhalation</i>		
LC50	Rat	20.8615 mg/l, 4 Hours estimated
<i>Oral</i>		
LD50	Rat	2699.0139 mg/kg estimated

Routes of exposure Inhalation. Ingestion. Skin contact. Eye contact.

Symptoms Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Skin irritation. May cause redness and pain.

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Direct contact with eyes may cause temporary irritation.

Respiratory sensitization Not available.

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.

China OELs for hazardous agents in the workplace: Carcinogen Category

TETRACHLOROETHYLENE (CAS 127-18-4) Probable human carcinogen

IARC Monographs. Overall Evaluation of Carcinogenicity

Tetrachloroethylene (CAS 127-18-4) 2A Probably carcinogenic to humans.

Toxic to reproduction May damage fertility or the unborn child.

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

Specific target organ toxicity following repeated exposure May cause damage to organs (Nervous system, Blood) through prolonged or repeated exposure.

Aspiration hazard May be harmful if swallowed and enters airways. Based on available data, the classification criteria are not met.

Chronic effects Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicological data

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 (Oncorhynchus mykiss) 4.73 - 5.27 mg/l, 96 hours
Ecotoxicity	Toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.	

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

Bioaccumulation

Bioaccumulative potential

Octanol/water partition coefficient log Kow

n-Propyl bromide	2.1
Tetrachloroethylene	2.88

Mobility in soil Not available.

Other hazardous effects None known.

13. Disposal considerations

Residual waste Dispose of in accordance with local regulations.

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.

Recommended methods for final destination

Local disposal regulations Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national regulations.

14. Transport information

CNDG

UN number	UN1950
UN proper shipping name	Aerosols, non-flammable, containing substances in Division 6.1, Packing Group III, Limited Quantity
Transport hazard class(es)	
Class	2.2
Subsidiary risk	6.1(PGIII)
Packing group	-
Environmentally hazardous	Yes

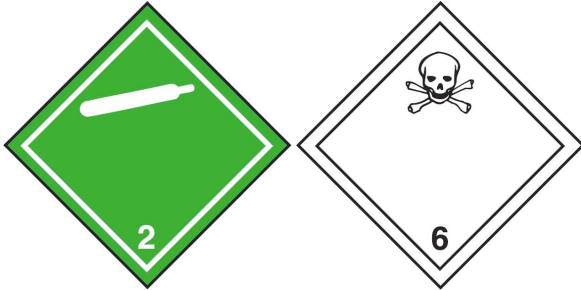
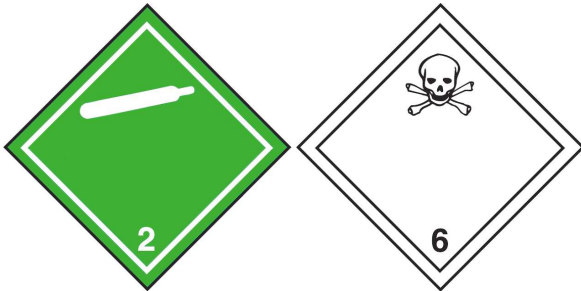
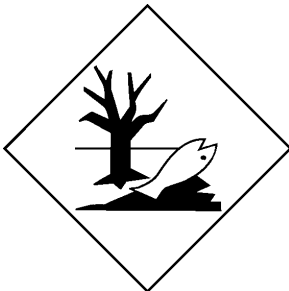
IATA

UN number	UN1950
UN proper shipping name	Aerosols, non-flammable, containing substances in Division 6.1, Packing Group III, Limited Quantity
Transport hazard class(es)	
Class	2.2
Subsidiary risk	6.1
Packing group	Not applicable.
Environmental hazards	Yes
ERG Code	2P
Special precautions for user	Not available.
Other information	
Passenger and cargo aircraft	Allowed.
Cargo aircraft only	Allowed.

IMDG

UN number	UN1950
UN proper shipping name	Aerosols, non-flammable, containing substances in Division 6.1, Packing Group III, Limited Quantity, MARINE POLLUTANT
Transport hazard class(es)	
Class	2.2
Subsidiary risk	6.1(PGIII)
Packing group	Not applicable.
Environmental hazards	
Marine pollutant	Yes
EmS	Not available.
Special precautions for user	Not available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

CNDG; IMDG**IATA****Marine pollutant**

15. Regulatory information
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).

Applicable regulations

This safety data sheet conforms to the following laws, regulations and standards:
 Regulations on the Control over Safety of Dangerous Chemicals
 Regulations on Labor Protection in Workplaces Where Toxic Products Are Used
 Measures for the Safe Use of Chemicals in Workplaces
 Safety Data Sheet for Chemical Products - Content and Order of Sections (GB/T 16483-2008)
 General Rules for Preparation of Precautionary Labels for Chemicals (GB15258-2009)
 Packing Symbol of Dangerous Goods(GB190-2009)
 Packing - Pictorial Marking for Handling of Goods (GB/T191-2009)

General Rule For Classification and Hazard Communication of Chemicals (GB 13690-2009) and Dangerous Chemical Products

Carbon dioxide (CAS 124-38-9)
n-Propyl bromide (CAS 106-94-5)
Tetrachloroethylene (CAS 127-18-4)

Occupational exposure limits for hazardous agents in the workplace (GBZ 2.1-2007)

Carbon dioxide (CAS 124-38-9)
Tetrachloroethylene (CAS 127-18-4)

National Catalogue of Hazardous Waste, Appendix A

Tetrachloroethylene (CAS 127-18-4)

Restricted Import/Export Toxic Chemical List (MEP and GCA Announcement No. 2008-66, Dec. 1, 2008, amended through MEP and Customs Notice No. 2011-91, December 28, 2011)

Tetrachloroethylene (CAS 127-18-4)

Classification and code of dangerous goods (GB6944-2005)

Regulated.

List of Dangerous Goods (GB 12268-2005)

Regulated.

The Principle of Classification of Transport Packaging Groups of Dangerous Goods (GB/T15098-2008)

Regulated.

General Specifications for Transport Packages of Dangerous Goods (GB 12463-2009)

Regulated.

Regulations on Road Transport of Dangerous Goods

Regulated.

Regulations on Rail Road Transport of Dangerous Goods

Regulated.

UN Recommendations on the Transport of Dangerous Goods (UN RTDG)

Regulated.

16. Other information**References**

EPA: AQUIRE database
NLM: Hazardous Substances Data Base
US. IARC Monographs on Occupational Exposures to Chemical Agents

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 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 (M)SDS consult your supervisor, a health & safety professional, or CRC Industries.