# SAFETY DATA SHEET

## 1. Identification

| | |
|---|---|
| **Product identifier** | **Cable Clean® RD™** |
| **Other means of identification** | |
| **Product code** | 02152 |
| **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.<br>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)<br>703-527-3887 (International) |
| **Website** | www.crcindustries.com |

## 2. Hazard(s) identification

| | | |
|---|---|---|
| **Physical hazards** | Not classified. | |
| **Health hazards** | Skin corrosion/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 |
| **Environmental hazards** | Hazardous to the aquatic environment, long-term hazard | Category 2 |
| **OSHA defined hazards** | Not classified. | |

**Label elements**

| | |
|---|---|
| **Signal word** | Danger |
| **Hazard statement** | Causes skin irritation. May cause drowsiness or dizziness. May cause cancer. May damage fertility or the unborn child. May cause damage to organs (liver, kidneys) 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. 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. 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. If skin irritation occurs: Get medical 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 attention. Collect spillage. |

| | |
|---|---|
| **Storage** | Store in a well-ventilated place. Keep container tightly closed. Store locked up. |
| **Disposal** | Dispose of contents/container in accordance with local/regional/national regulations. |
| **Hazard(s) not otherwise classified (HNOC)** | None known. |

## 3. Composition/information on ingredients

**Mixtures**

| Chemical name | Common name and synonyms | CAS number | % |
|---|---|---|---|
| Tetrachloroethylene | Perchloroethylene | 127-18-4 | 90 - 100 |
| n-Propyl bromide | | 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. 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. Headache. Nausea, vomiting. Skin irritation. May cause redness and pain. 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 (CO2). |
| **Unsuitable extinguishing media** | None known. |
| **Specific hazards arising from the chemical** | 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** | No unusual fire or explosion hazards noted. |

## 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. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. 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. |
| **Methods and materials for containment and cleaning up** | 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. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.<br><br>Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. |
| **Environmental precautions** | Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases. |

## 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. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices. For product usage instructions, please see the product label.

**Conditions for safe storage, including any incompatibilities**

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

**Occupational exposure limits**

**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 |
|---|---|---|
| n-Propyl bromide (CAS 106-94-5) | TWA | 0.1 ppm |
| Tetrachloroethylene (CAS 127-18-4) | STEL | 100 ppm |
| | TWA | 25 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. Eye wash facilities and emergency shower must be available when handling this product.

**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: Polyvinyl alcohol (PVA). Viton®.

**Other**

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

**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.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

When using, do not eat, drink or 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** | 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** | 159.8 °F (71 °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 (%)** | Not determined. |
| **Flammability limit - upper (%)** | Not determined. |
| **Vapor pressure** | 19.9 hPa estimated |
| **Vapor density** | > 1 (air = 1) |
| **Relative density** | 1.61 |
| **Solubility (water)** | Not available. |
| **Partition coefficient (n-octanol/water)** | Not available. |
| **Auto-ignition temperature** | 914 °F (490 °C) estimated |
| **Decomposition temperature** | Not available. |
| **Viscosity (kinematic)** | Not available. |
| **Percent volatile** | 100 % 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 reactions** | No dangerous reaction known under conditions of normal use. |
| **Conditions to avoid** | Heat, flames and sparks. 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. Contact with incompatible materials. |
| **Incompatible materials** | Acids. Bases. Strong oxidizing agents. Powdered metal. Sodium. Amines. Oxygen. Peroxide. |
| **Hazardous decomposition products** | Hydrogen chloride. Hydrogen bromide. Chlorine. Phosgene. Carbon oxides. |

## 11. Toxicological information

**Information on likely routes of exposure**

| | |
|---|---|
| **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. |
| **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** | Direct contact with eyes may cause temporary irritation. |
| **Symptoms related to the physical, chemical and toxicological characteristics** | May cause drowsiness and dizziness. Headache. Nausea, vomiting. Irritation of nose and throat. Skin irritation. May cause redness and pain. |

**Information on toxicological effects**

**Acute toxicity** Narcotic effects.

| Product | Species | Test Results |
|---|---|---|
| Cable Clean® RD™ | | |
| **Acute** | | |
| *Dermal* | | |
| LD50 | Rabbit | 3188.8411 mg/kg estimated |
| *Inhalation* | | |
| LC50 | Rat | 3863.2654 ppm, 4 hours estimated |
| | | 20.407 mg/l, 4 Hours estimated |
| *Oral* | | |
| LD50 | Rat | 2640.2131 mg/kg estimated |

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

**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.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

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

**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 through prolonged or repeated exposure: Liver. Kidneys.

**Aspiration hazard** Not available.

**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.

| Product | | Species | Test Results |
|---|---|---|---|
| Cable Clean® RD™ | | | |
| **Aquatic** | | | |
| Fish | LC50 | Fish | 19.0125 mg/l, 96 hours estimated |
| **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 |

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

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

**Bioaccumulative potential** No data available.

**Partition coefficient n-octanol / water (log Kow)**

| | |
|---|---|
| n-Propyl bromide | 2.1 |
| Tetrachloroethylene | 2.88 |

**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** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. 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 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** UN2810
**UN proper shipping name** Toxic, liquids, organic, n.o.s. (Tetrachloroethylene RQ = 102 LBS, n-Propyl bromide RQ = 5263 LBS), Limited Quantity, MARINE POLLUTANT (Tetrachloroethylene)
**Transport hazard class(es)**
**Class** 6.1(PGIII)
**Subsidiary risk** -
**Label(s)** 6.1
**Packing group** III
**Environmental hazards**
**Marine pollutant** Yes
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.
**Special provisions** IB3, T7, TP1, TP28
**Packaging exceptions** 153
**Packaging non bulk** 203
**Packaging bulk** 241

**IATA**

**UN number** UN2810
**UN proper shipping name** Toxic liquid, organic, n.o.s. (Tetrachloroethylene, n-Propyl bromide)
**Transport hazard class(es)**
**Class** 6.1(PGIII)
**Subsidiary risk** -
**Packing group** III
**Environmental hazards** No.
**ERG Code** 6L
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.
**Other information**
**Passenger and cargo aircraft** Allowed.
**Cargo aircraft only** Allowed.

**IMDG**

**UN number** UN2810
**UN proper shipping name** TOXIC LIQUID, ORGANIC, N.O.S. (Tetrachloroethylene, n-Propyl bromide), LIMITED QUANTITY, MARINE POLLUTANT
**Transport hazard class(es)**
**Class** 6.1(PGIII)
**Subsidiary risk** -

| | |
|---|---|
| **Packing group** | III |
| **Environmental hazards** | |
| **Marine pollutant** | Yes |
| **EmS** | F-A, S-A |
| **Special precautions for user** | Read safety instructions, SDS and emergency procedures before handling. |

## 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.

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

Not regulated.

**SARA 304 Emergency release notification**

Not regulated.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

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

Tetrachloroethylene (CAS 127-18-4)

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Tetrachloroethylene (CAS 127-18-4)

**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<br>Delayed Hazard - Yes<br>Fire Hazard - No<br>Pressure Hazard - No<br>Reactivity Hazard - No |
| **SARA 302 Extremely hazardous substance** | No |

**US state regulations**

**US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. New Jersey Worker and Community Right-to-Know Act**

n-Propyl bromide (CAS 106-94-5)
Tetrachloroethylene (CAS 127-18-4)

**US. Massachusetts RTK - Substance List**

n-Propyl bromide (CAS 106-94-5)
Tetrachloroethylene (CAS 127-18-4)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Tetrachloroethylene (CAS 127-18-4)
n-Propyl bromide (CAS 106-94-5)

**US. Rhode Island RTK**

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**

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** Not regulated

**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** 01-22-2015

**Prepared by** Allison Cho

**Version #** 01

**Further information** CRC # 474B

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

**NFPA ratings** Health: 2
Flammability: 0
Instability: 0

**NFPA ratings**

**Disclaimer**

CRC cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. 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.