

# Safety Data Sheet (SDS)

## SECTION 1: IDENTIFICATION

Manufacturer/Distributor ..... Rainbow Technology Corporation (800)637-6047  
 Contact Person..... Larry Joe Steeley, Jr.  
 Emergency Phone (24 Hrs.) .... Chem-Tel Inc. (800) 255-3924  
 Trade Name/Synonyms ..... **Rainbow CP (Cable Prep) Cleaner**  
 Product Number ..... **42150 (Aerosol)**  
 Chemical Name ..... Proprietary  
 Formula ..... Proprietary  
 Issue Date ..... October 8, 2015  
 Replaces SDS Dated..... May 27, 2014

## SECTION 2: HAZARD IDENTIFICATION

This material is hazardous under the OSHA communication standard (29CFR 1910.1200).



**1. Classification**

|  |                           |
|--|---------------------------|
| Skin irritation                                  | Category 2                |
| Eye irritation                                   | Category 2B               |
| Carcinogen                                       | Category 1B               |
| Reproductive toxicity                            | Category 1B               |
| Specific target organ toxicity (single exposure) | Category 3 – (H335, H336) |
| Ingestion (Acute Toxicity Oral)                  | Category 4                |

N-Propyl bromide has no flash point and is non-flammable per OSHA and DOT regulations. Vapors will form a flammable mixture at a concentration of 3.8% to 9.5% by volume with air (ASTM E-681).

**Signal Word:** Danger

**Hazard Statements**

- H303 May be harmful if swallowed
- H315 Causes skin irritation.
- H320 Causes eye irritation
- H333 May be harmful if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H350 May cause cancer.
- H360 May damage fertility.

## SECTION 2: HAZARD IDENTIFICATION (continued)

### Prevention

- P202 Do not handle until all safety precautions have been read and understood. P233  
Keep container tightly closed.
- P260 Do not breathe vapors.
- P262 Do not get in eyes, on skin or clothing.
- P270 Do not eat, drink or smoke when using this product P271 Use  
in a well-ventilated area.
- P273 Avoid release into the environment.
- P280 Wash face, hands and any exposed skin thoroughly after handling. Wear safety glasses or full face  
shield. Wear Viton gloves. DO NOT use natural rubber gloves when handling this product.
- P281 Use personal protective equipment as required. P284  
Wear respiratory protection.

### Response

- P308 + P313 IF EXPOSED or concerned: Get medical advice/attention P305 + P351 +  
P338 + P337 IF IN EYES: Rinse cautiously with water for several minutes.  
Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313  
If eye irritation persists, get medical advice/attention
- P303 + P361 + P353 + P352 IF ON SKIN: remove immediately all contaminated clothing.  
Wash with plenty of soap and water. P332 + P313 If skin irritation occurs, get  
medical advice/attention.
- P304 + P340 IF INHALED: Remove individual to fresh air and keep at rest in a position  
comfortable for breathing.
- P301 + P330 + P331 IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.
- P306 + P361+ P363 IF ON CLOTHING: remove immediately all contaminated  
clothing. Wash contaminated clothing before reuse.

## SECTION 3: COMPOSITION

| COMPONENT NAME(S)  | CAS NO   | CONCENTRATION (%) |
|--------------------|----------|-------------------|
| n-Propyl bromide   | 106-94-5 | 90-95             |
| 1,2 butylene oxide | 106-88-7 | <1                |
| n-Propanol         | 71-23-8  | <4                |
| Carbon Dioxide     | 124-38-9 | 1-3               |

## SECTION 4: FIRST AID MEASURES

**Take proper precautions to ensure your own health and safety before attempting rescue or providing first aid.**

**For more specific information, refer to Exposure Controls and Personal Protection in Section 8 of this MSDS.**

**IF SWALLOWED:** Immediately call a **POISON CENTER/doctor**. Do **NOT** induce vomiting. If spontaneous vomiting is about to occur, place victims head between their knees to prevent aspiration. Call a physician or transport to an emergency facility immediately.

**IF IN EYES:** Rinse cautiously with water for several minutes. Lift upper and lower eyelids to ensure proper rinsing. Get medical attention if irritation persists.

**IF ON SKIN:** Wash skin with soap and water. Remove contaminated clothing and launder it before reuse. Should any irritation persist, get medical attention.

**IF INHALED:** Increase fresh air circulation or leave area. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm and quiet. Get immediate medical attention.

**SECTION 5: FIRE FIGHTING MEASURES**

**NFPA Flammability Classification: LEVEL 1 Aerosol**

**FLASH POINT:** Not Determined      **FLAMMABLE LIMITS: UEL 9.5 % LEL 3.8 %**

**EXTINGUISHING MEDIUM:** Water may be effective for cooling but not extinguishing. Carbon dioxide, dry chemical powder, alcohol foam, or polymer foam are recommended for this material.

**SPECIAL FIREFIGHTING PROCEDURES:** Wear self-contained breathing apparatus when fighting fires containing or around this product. Shut off all sources of ignition, if possible. Keep exposed containers cool with water spray to prevent rupture. Evacuate all non-trained personnel. Wear full protective clothing, including helmet. Ventilate area. Contain spill and dike, if possible. For leaks or spills water spray can be used to disperse any flammable vapors that may become concentrated or form in poorly ventilated areas and to protect personnel attempting to stop the leak.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Firefighters should wear SCBA's in a positive pressure mode with full face shield. Vapors are heavier than air and may travel long distances and accumulate in low areas or spread along ground from handling site. Eliminate all sources of ignition. Never use welding or cutting torch on or near this product because even just residue can ignite explosively.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Take proper precautions to ensure your own health and safety before attempting spill control or clean-up.**

Ventilate area-especially low places where heavy vapors might collect. Extinguish all ignition sources. For small spills/leaks mop, wipe, or soak up on an inorganic material immediately. Remove to vent hood or outside. For large spills/leaks evacuate area, contain spill (dike area), and transfer contained liquid to a DOT approved container for disposal. Keep out of water supply. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personnel protective equipment.

**SECTION 7: HANDLING AND STORAGE**

Store in tightly sealed containers. Keep away from heat, sparks & open flame. Do not get in eyes, on skin or clothing. Do not breathe vapor, mist or gas. Do not store or transfer to an unmarked container. Do not throw empty containers in trash compactor. Do not store in direct sun. Store containers below 120°F. Read label before using.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**ENGINEERING CONTROLS:** Control airborne concentrations below the exposure limits see below. Use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations. Lethal concentrations may exist in areas with poor ventilation.

**PERSONAL PROTECTIVE EQUIPMENT:** Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to OSHA regulations. Minimum requirements are: SAFETY GLASSES and GLOVES.

**RESPIRATORY PROTECTION (SPECIFY TYPE):** If workplace exposure limit(s) of product or any component is exceeded (see Section two), a NIOSH approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH respirators (negative pressure type) under specified conditions (see your safety equipment supplier). Engineering or administrative controls should be implemented to reduce exposure.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

**HAND PROTECTION:** For brief contact, no precautions should be needed. When prolonged or frequently repeated contact could occur, use protective gloves such as; polyvinyl alcohol or polyethylene.

**EYE PROTECTION:** Chemical splash goggles in compliance with OSHA regulations are advised; OSHA regulations also permit other type of safety glasses (consult your safety equipment supplier)

**BODY PROTECTION:** To prevent repeated or prolonged skin contact, use protective clothing impervious to this product. Selection of specific items such as gloves, boots, apron, or full body suit will depend on operation.

### OCCUPATIONAL EXPOSURE GUIDELINES:

| Substance        | Applicable Workplace Exposure Levels |              |           |
|------------------|--------------------------------------|--------------|-----------|
|                  | OSHA PEL                             | ACGIH        | USEPA     |
| N-propyl bromide | NE                                   | TLV-0.10 ppm | 18-30 ppm |
| Carbon Dioxide   | 5000 ppm                             | 5000 ppm     |           |

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

|  |                                    |                                      |
|--|------------------------------------|--------------------------------------|
| PHYSICAL STATE: Aerosol Spray                    | COLOR: Clear                       | ODOR: Sweet                          |
| SPECIFIC GRAVITY: 1.10-1.35 (Water =1)           | pH: N/A                            | VAPOR DENSITY (Air =1): Heavier than |
| BOILING POINT RANGE: N/D                         | MELTING POINT /FREEZING POINT: N/D |                                      |
| VAPOR PRESSURE (mmHg or psig @70°F): 80-110 psig |                                    | VISCOSITY (cps @ 70°F) N/D           |
| SOLUBILITY IN WATER % BY WT.: Insoluble          |                                    |                                      |
| VOLATILE ORGANIC COMPOUNDS (VOCs) Content: N/A % |                                    |                                      |

## SECTION 10: STABILITY AND REACTIVITY

**STABILITY:** Stable, avoid open flames, welding arcs or other high temperature sources which induce thermal decomposition and direct sunlight.

**CONDITONS TO AVOID:** Avoid open flame, electric arc and other high energy ignition sources. Prolonged contact with free water may result in diminished stabilizer and corrosion.

**INCOMPATIBILITY:** Avoid contact with strong alkalis, oxidizers, bases, reactive metals and natural rubber.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition produces carbon dioxide, carbon monoxide, and hydrogen bromide.

**HAZARDOUS POLYMERIZATION:** Will not occur

## SECTION 11: TOXICOLOGICAL INFORMATION

No toxicological studies have been conducted on this product as an aerosol.

### **n propyl bromide**

LD<sub>50</sub> oral rat: 4,260 mg/kg

LC<sub>50</sub> inhalation rat: 30 min. 50,291 ppm  
4 hr. 14,374 ppm

High concentrations are irritating to the respiratory tract and may cause headache, dizziness, nausea, vomiting or narcosis. Chronic overexposure at high levels may cause adverse effects in the central nervous system, reproductive system, respiratory system, kidney and liver. Persons having pre-existing diseases of the lungs, eyes or skin may have an increased susceptibility to the hazards of excessive exposure. Cancer: NTP: - reasonably anticipated to be a human carcinogen. IARC - Not listed. Mutagenic Effects: In vivo mutagenicity tests: Negative

**1,2-Butylene oxide** (< 0.6% by weight of total product) NTP: NO IARC: Group 2B OSHA: NO

## SECTION 12: ECOLOGICAL INFORMATION

No ecological studies have been conducted on this product as an aerosol.

ECOTOXICITY: If spilled this any water or soil contaminated may be hazardous to human, animal and aquatic life.

ENVIRONMENTAL FATE: The chemicals in this product are potentially toxic to freshwater and salt water ecosystems. They will normally float on water with their lighter components evaporating rapidly. In stagnant or slow-flowing waterways, a hydrocarbon layer can cover a large surface area. As a result this layer might limit or eliminate natural atmospheric oxygen transport into the water. Which with time could lead to a fish kill or an anaerobic environment.

Available data on the organic carbon partition coefficient ( $K_{OC}$ ) the breakdown processes in water and hydrolysis half-life, and the volatilization half-life indicate that nPB is less persistent in the environment than many solvents and would be of low to moderate concern for movement in soil. Based on the  $LC_{50}$ , the acute concentration at which 50% of tested animals die, nPB 'toxicity to aquatic life is moderate, being less than that for ... trichloroethylene, hexane, *d*-limonene, and possibly some aqueous cleaners. Based on EPA's criteria for listing under the Toxics Release Inventory (U.S. EPA, 1992), we believe that nPB would not be sufficiently toxic to aquatic life to warrant listing under the Toxics Release Inventory. Based on its relatively low bio-concentration factor and log  $K_{OW}$  value, nPB is not prone to bioaccumulation." (USEPA - Federal Register May 30, 2007).

|   |                           |
|---|---------------------------|
| $K_{OC}$ , ORGANIC-CARBON PARTITION COEFFICIENT | 330                       |
| BREAK DOWN IN WATER                             | Hydrolysis is significant |
| HYDROLYSIS HALF-LIFE                            | 26 DAYS                   |
| VOLATILIZATION HALF-LIFE FROM SURFACE WATERS    | 3.4 HOURS – 4.4 DAYS      |
| $LC_{50}$ (96 HOURS) FOR FATHEADMINNOWS         | 67 mg/l                   |
| LOG $K_{OW}$                                    | 2.10                      |
| BIOCONCENTRATION FACTOR                         | 23                        |

## SECTION 13: DISPOSAL CONSIDERATIONS

Hazard characteristics and regulatory waste stream classification can change with product use. It is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition.

When disposing of unused contents, the preferred options are to send to licensed reclaimers or to permitted incinerators. Any disposal practice must be in compliance with federal, state, and local laws and regulations. Do not dump into sewers, on the ground, or into any body of water.

## SECTION 14: TRANSPORT INFORMATION

DOT STATUS: This material is regulated by the U.S. Department of Transportation (DOT).

PROPER SHIPPING NAME: (to ship on the ocean):

UN1950, AEROSOLS, NON-FLAMMABLE (each not exceeding 1L capacity), 2.2, LTD. QTY

HAZARD CLASS: 2.2

PACKING GROUPS: None for aerosols

PLACARDS: None Required

EMERGENCY RESPONSE GUIDE NO: 126

## SECTION 15: REGULATORY INFORMATION

**311/312 HAZARD CATEGORIES:**

Fire Hazard: YES    Pressure Hazard: YES    Reactivity Hazard: NO    Immediate Hazard: YES    Delayed Hazard: YES

**SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III:**

| CHEMICAL           | CAS NUMBER | CONCENTRATION % |
|--------------------|------------|-----------------|
| 1,2-butylene oxide | 106-88-7   | <1%             |

**FEDERAL EPA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)** requires the notification of the National Response Center of release of quantities of hazardous substances equal to or greater than the reportable quantities (rqs) in 40 CFR 302.4.

| CHEMICAL           | CAS NUMBER | CONCENTRATION % UPPER BOUND | RQs IN # |
|--------------------|------------|-----------------------------|----------|
| 1,2-butylene oxide | 106-88-7   | <1%                         | 100      |

**CALIFORNIA PROPOSITION 65:** Yes **WARNING:** Known to the state of California to cause birth defects or other reproductive effects.

**MASSACHUSETTS RIGHT TO KNOW:** Yes

|                  |          |       |
|------------------|----------|-------|
| N Propyl Bromide | 106-94-5 | 90-95 |
|------------------|----------|-------|

**PENNSYLVANIA RIGHT TO KNOW:** Yes

|                  |          |       |
|------------------|----------|-------|
| N Propyl Bromide | 106-94-5 | 90-95 |
|------------------|----------|-------|

**NEW JERSEY RIGHT TO KNOW:** Yes

|                  |          |       |
|------------------|----------|-------|
| N Propyl Bromide | 106-94-5 | 90-95 |
|------------------|----------|-------|

## SECTION 16: OTHER INFORMATION

**REVISION INFORMATION**

VERSION NUMBER: 1.0001

REVISION DATE: 10/8/2015

PRINT DATE:

**ABBREVIATIONS:**

N/A: Not Applicable

N/D: Not Determined

NE: Not Established

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

OSHA: Occupational Safety and Health Administration

HMIS: Hazardous Materials Information System

NFPA: National Fire Protection Association

EPA: US Environmental Protection Agency NIOSH: National Institute of Occupational Safety

and Health

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