CRO

SAFETY DATA SHEET

1. Identification

Product identifier Cable Clean® Degreaser

Other means of identification

Product code 02066

Recommended useCable degreaser **Recommended restrictions**None known.

Manufacturer/Importer/Supplier/Distributor information

Company name CRC Industries, Inc.

Address 885 Louis Dr.

Warminster, PA 18974 US

Telephone

 General Information
 215-674-4300

 Technical
 800-521-3168

Assistance

 Customer Service
 800-272-4620

 24-Hour Emergency
 800-424-9300 (US)

(CHEMTREC) 703-527-3887 (International)
Website www.crcindustries.com

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2
Carcinogenicity Category 2
Reproductive toxicity Category 1B

Specific target organ toxicity, single exposure Category 3 respiratory tract irritation

Specific target organ toxicity, single exposure Category 3 narcotic effects

Specific target organ toxicity, repeated Category 2 (kidney, liver, nervous system)

exposure

Environmental hazards Hazardous to the aquatic environment, acute Category 3

hazard

OSHA defined hazards Not classified.

Label elements





Signal word Danger

Hazard statementCauses skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of causing cancer. May damage fertility or the unborn child.

May cause damage to organs (kidney, liver, nervous system) through prolonged or repeated

exposure. Harmful to aquatic life.

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. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Avoid release to the environment.

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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. If exposed or concerned:

Get medical advice/attention.

Storage Keep cool. 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.

Supplemental information

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

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
n-propyl bromide	1-bromopropane	106-94-5	90 - 100
butylene oxide		106-88-7	1 - 3
t-butanol		75-65-0	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. Call a POISON CENTER or doctor/physician.

Most important symptoms/effects, acute and

delayed

Indication of immediate medical attention and special treatment needed

General information

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. May cause respiratory irritation. Skin irritation. May cause redness and pain. Edema. Jaundice. Prolonged exposure may cause chronic effects.

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

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

Alcohol resistant foam. Powder. Carbon dioxide (CO2).

Unsuitable extinguishing media

,

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal

Special protective equipment

corrosive gases such as hydrogen bromide.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

and precautions for firefighters

Move containers from fire area if you can do so without risk.

equipment/instructions
General fire hazards

Fire-fighting

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch or walk through spilled material. 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

Use water spray to reduce vapors or divert vapor cloud drift. Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. 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. 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. 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 a cool, dry place out of direct sunlight. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

Value

8. Exposure controls/personal protection

Occupational exposure limits

Components

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)

Type

Components	туре	value	
t-butanol (CAS 75-65-0)	PEL	300 mg/m3	
		100 ppm	
US. ACGIH Threshold Limit Valu	es		
Components	Туре	Value	
n-propyl bromide (CAS 106-94-5)	TWA	0.1 ppm	
t-butanol (CAS 75-65-0)	TWA	100 ppm	
US. NIOSH: Pocket Guide to Che	emical Hazards		
Components	Туре	Value	
t-butanol (CAS 75-65-0)	STEL	450 mg/m3	
		150 ppm	
	TWA	300 mg/m3	
		100 ppm	
US. AIHA Workplace Environmen	ntal Exposure Level (WEEL) Gi	ıides	
Components	Туре	Value	
butylene oxide (CAS 106-88-7)	TWA	5.9 mg/m3	
		2 ppm	

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

US - California OELs: Skin designation

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

Can be absorbed through the skin.

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 should be available when handling this product. 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®. Silver Shield®

Other Wear appropriate chemical resistant clothing.

below the TLV. Air monitoring is required 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. 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 Liquid.

Color Clear. Colorless.

Odor Solvent.

Odor threshold Not available.
pH Not available.

Melting point/freezing point -266.8 °F (-166 °C) estimated Initial boiling point and boiling 145.9 °F (63.3 °C) estimated

range

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 149.3 hPa estimated

Vapor density4.3 (air = 1)Relative density1.32Solubility (water)0.003 g/mlPartition coefficientNot available.

(n-octanol/water)

Auto-ignition temperature 822 °F (438.9 °C) estimated

Decomposition temperatureNot available.Viscosity (kinematic)Not available.Percent volatile100 %

10. Stability and reactivity

ReactivityThe 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. Contact with incompatible materials.

Incompatible materials Strong acids. Strong bases.

Hazardous decomposition |

products

Hydrogen bromide. Carbon oxides.

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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. May cause irritation to the respiratory

system. Prolonged inhalation may be harmful.

Skin contact Causes skin irritation.

Eye contact Causes serious eye irritation.

Ingestion Health injuries are not known or expected under normal use.

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. May cause respiratory irritation. Skin irritation. May

cause redness and pain. Edema. Jaundice.

Information on toxicological effects

Acute toxicity Narcotic effects. May cause respiratory irritation.

Components	Species	Test Results	
butylene oxide (CAS 106-8	38-7)		
<u>Acute</u>			
Dermal			
LD50	Rabbit	1760 mg/kg	
Oral			
LD50	Rat	1180 mg/kg	
n-propyl bromide (CAS 106	6-94-5)		
<u>Acute</u>			
Dermal			
LD50	Rabbit	> 2000 mg/kg	
Inhalation			
LC50	Rat	14374 ppm, 4 hours	
Oral			
LD50	Rat	4260 mg/kg	
t-butanol (CAS 75-65-0)			
<u>Acute</u>			
Dermal			
LD50	Rabbit	> 2000 mg/kg	
Inhalation			
LC50	Rat	> 14100 ppm, 4 hours	
Oral			
LD50	Rat	3500 mg/kg	

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

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye Causes serious eve irritation.

irritation

Not a respiratory sensitizer. Respiratory sensitization

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

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

mutagenic or genotoxic.

May cause cancer. Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

butylene oxide (CAS 106-88-7) 2B Possibly carcinogenic to humans. n-propyl bromide (CAS 106-94-5) 2B Possibly 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.

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

Not regulated.

Reproductive toxicity May damage fertility or the unborn child.

Specific target organ toxicity -

single exposure

May cause respiratory irritation. May cause drowsiness and dizziness.

Specific target organ toxicity -

repeated exposure

Kidneys. Liver. Nervous system. May cause damage to organs (kidney, liver, nervous system) through prolonged or repeated exposure. May cause damage to organs 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 Harmful to aquatic life.

Components		Species	Test Results
n-propyl bromide (CAS 106	i-94-5)		
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	67.3 mg/l, 96 hours
t-butanol (CAS 75-65-0)			
Acute			
	EC10	Bacteria	2050 mg/l, 18 hours
	EC50	Bacteria	11263 mg/l
Aquatic			
Acute			
Algae	EC50	Green algae (Chlamydomonas variabilis)	> 976 mg/l
Crustacea	EC50	Water flea (Daphnia magna)	5504 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	> 961 mg/l, 96 hours

^{*} 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 t-butanol 0.35 **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 product is not a RCRA hazardous waste (See 40 CFR Part 261.20 - 261.33). Empty containers may be recycled. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. 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.

Not regulated. Hazardous waste code

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.

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SDS US

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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 regulated.

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

acetonitrile (CAS 75-05-8) butylene oxide (CAS 106-88-7) n-propyl bromide (CAS 106-94-5) t-butanol (CAS 75-65-0)

CERCLA Hazardous Substance List (40 CFR 302.4)

butylene oxide (CAS 106-88-7) Listed.

CERCLA Hazardous Substances: Reportable quantity

butylene oxide (CAS 106-88-7) 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

butylene oxide (CAS 106-88-7)

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

Not regulated.

Safe Drinking Water Act Not regulated.

(SDWA)

Food and Drug Not regulated.

Administration (FDA)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

SARA 302 Extremely No hazardous substance

US state regulations This product is not labeled for use in California.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

butylene oxide (CAS 106-88-7) n-propyl bromide (CAS 106-94-5) t-butanol (CAS 75-65-0)

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

acetonitrile (CAS 75-05-8) butylene oxide (CAS 106-88-7) n-propyl bromide (CAS 106-94-5) t-butanol (CAS 75-65-0)

US. Massachusetts RTK - Substance List

butylene oxide (CAS 106-88-7)

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

t-butanol (CAS 75-65-0)

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

acetonitrile (CAS 75-05-8) butylene oxide (CAS 106-88-7) n-propyl bromide (CAS 106-94-5) t-butanol (CAS 75-65-0)

US. Rhode Island RTK

acetonitrile (CAS 75-05-8) butylene oxide (CAS 106-88-7) t-butanol (CAS 75-65-0)

US. California Proposition 65

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

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

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

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

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

Volatile organic compounds (VOC) regulations

EPA

VOC content (40 CFR 100 %

51.100(s))

Consumer products Not regulated

(40 CFR 59, Subpt. C)

State

Consumer products Not regulated 100 % VOC content (CA) 100 % VOC content (OTC)

International Inventories

Country(s) or region

Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
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

Inventory name

Issue date 08-28-2014 **Revision date** 01-20-2017 Allison Cho Prepared by

Version # 03

Further information CRC # 435

Material name: Cable Clean® Degreaser

On inventory (yes/no)*

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 This document has undergone significant changes and should be reviewed in its entirety.

SDS US

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