CRC

SAFETY DATA SHEET

1. Identification

Product identifier Battery Cleaner with Acid Indicator

Other means of identification

Product Code No. 75097 (Item# 1006340)

Recommended use Battery cleaner
Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufactured or sold by:

Company nameCRC Canada Co.Address2-1246 Lorimar Drive

Mississauga, Ontario L5S 1R2

Canada

Telephone

General Information 905-670-2291

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

Website www.crc-canada.ca

E-mail Support.CA@crcindustries.com

2. Hazard(s) identification

Physical hazards Gases under pressure Liquefied gas

Health hazards Not classified.
Environmental hazards Not classified.

Label elements



Signal word Warning

Hazard statement Contains gas under pressure; may explode if heated.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Protect from sunlight. Store in a well-ventilated place.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Other hazards None known.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
water		7732-18-5	80 - 100
liquefied petroleum gas		68476-86-8	3 - 7
2-butoxvethanol		111-76-2	1 - 5

The exact percentage (concentration) of composition has been withheld as a trade secret.

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Material name: Battery Cleaner with Acid Indicator

No. 75097 (Item# 1006340) Version #: 02 Revision date: 10-13-2017 Issue date: 03-21-2017

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

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.

Direct contact with eyes may cause temporary irritation.

Most important symptoms/effects, acute and

delayed

Provide general supportive measures and treat symptomatically.

Indication of immediate medical attention and special treatment needed

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

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

equipment/instructions
Specific methods
General fire hazards

Fire fighting

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.

Use standard firefighting procedures and consider the hazards of other involved materials. 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. 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

Stop leak if you can do so without risk. 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. 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. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

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. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

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).

Material name: Battery Cleaner with Acid Indicator

No. 75097 (Item# 1006340) Version #: 02 Revision date: 10-13-2017 Issue date: 03-21-2017 2 / 7

8. Exposure controls/personal protection

_	4.		
()ccii	nationa	l exposure	limits

2-butoxyethanol (CAS

US. ACGIH	Threshold	Limit Values
-----------	------------------	---------------------

Components	Туре	Value	
2-butoxyethanol (CAS 111-76-2)	TWA	20 ppm	
Canada. Alberta OELs (Occupa	ational Health & Safety Code, So	chedule 1, Table 2)	
Components	Туре	Value	

111-76-2) 20 ppm

TWA

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and

Safety Regulation 296/97, as amended)
Components
Type
Value

2-butoxyethanol (CAS
TWA
20 ppm

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)
Components

Type

Value

2-butoxyethanol (CAS TWA 20 ppm

111-76-2)

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

ComponentsTypeValue2-butoxyethanol (CAS
111-76-2)TWA20 ppm

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)
Components Type Value

2-butoxyethanol (CAS TWA 97 mg/m3 111-76-2)

20 ppm

97 mg/m3

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
2-butoxyethanol (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (BAA), with hydrolysis	Creatinine in urine	*

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

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.

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: Nitrile.Other Wear appropriate chemical resistant clothing.

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

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 Clear.
Odor Odorless.
Odor threshold Not available.

pH 8.5

 $\begin{tabular}{ll} \begin{tabular}{ll} \beg$

range

Flash point None (Tag Closed Cup)

Evaporation rate Slow.

Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits

Flammability limit - lower

1.3 % estimated

(%)

Flammability limit - upper 10.6

10.6 % estimated

(%)

Vapor pressure 266.4 hPa estimated

Vapor density > 1 (air = 1) Relative density 1.01

Solubility(ies)

Solubility (water) Soluble.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature 446 °F (230 °C) estimated

Decomposition temperature Not available. **Viscosity** Not available.

Other information

Percent volatile 94.2 % estimated

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. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

Carbon oxides. Aldehydes. Ketones. Organic acids.

11. Toxicological information

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful.

Skin contact 2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and

prolonged. These effects have not been observed in humans.

Eye contact Direct contact with eyes may cause temporary irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

Material name: Battery Cleaner with Acid Indicator

Information on toxicological effects

Acute toxicity Not known.

Components Species Test Results

2-butoxyethanol (CAS 111-76-2)

Acute Oral

LD50 Rat 1300 mg/kg

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

Skin corrosion/irritationProlonged skin contact may cause temporary irritation. **Serious eye damage/eye**Direct contact with eyes may cause temporary irritation.

irritation

Respiratory or skin sensitization

Canada - Alberta OELs: Irritant

2-butoxyethanol (CAS 111-76-2)

Irritant

Respiratory sensitization Not a respiratory sensitizer.

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

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

2-butoxyethanol (CAS 111-76-2) 3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects May be harmful if absorbed through skin. Prolonged inhalation may be harmful.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and

prolonged. These effects have not been observed in humans.

12. Ecological information

EcotoxicityThe product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components Species Test Results

2-butoxyethanol (CAS 111-76-2)

Aquatic

Acute

Crustacea EC50 Water flea (Daphnia magna) 1550 mg/l, 48 hours

Fish LC50 Rainbow trout, donaldson trout >= 1000 mg/l, 96 hours

(Oncorhynchus mykiss)

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

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

2-butoxyethanol 0.81, log Pow

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.

Material name: Battery Cleaner with Acid Indicator

SDS CANADA

No. 75097 (Item# 1006340) Version #: 02 Revision date: 10-13-2017 Issue date: 03-21-2017

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

13. Disposal considerations

Disposal of waste from residues / unused products Contents under pressure. Do not puncture, incinerate or crush. Empty container can be recycled. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of

contents/container in accordance with local/regional/national regulations.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

Not regulated.

Contaminated packaging

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

14. Transport information

TDG

UN number UN1950

UN proper shipping name

AEROSOLS, non-flammable, Limited Quantity

Transport hazard class(es)

2.2 Class Subsidiary risk

Not applicable. Packing group

Environmental hazards

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

Special provisions

IATA

UN1950 **UN** number

UN proper shipping name Aerosols, non-flammable, Limited Quantity

Transport hazard class(es)

Class 2.2 Subsidiary risk

Packing group Not applicable.

Environmental hazards No. **ERG Code** 2L

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

Other information

Passenger and cargo Allowed with restrictions.

aircraft

Allowed with restrictions. Cargo aircraft only

IMDG

UN1950 **UN** number

AEROSOLS, Limited Quantity **UN proper shipping name**

Transport hazard class(es)

Class 2 Subsidiary risk

Packing group Not applicable.

Environmental hazards

Marine pollutant No. **EmS** F-D, S-U

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

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

the IBC Code

15. Regulatory information

Canadian regulations

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Material name: Battery Cleaner with Acid Indicator

Precursor Control Regulations

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

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)	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)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	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).

Toxic Substances Control Act (TSCA) Inventory

16. Other information

 Issue date
 03-21-2017

 Revision date
 10-13-2017

Version # 02

United States & Puerto Rico

Further information CRC # 530C/1002544

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 Canada Co..

Revision Information Product and Company Identification: Product Codes

Composition / Information on Ingredients: Ingredients

Composition/information on ingredients: Component information

Other information: Further information

No. 75097 (Item# 1006340) Version #: 02 Revision date: 10-13-2017 Issue date: 03-21-2017

7/7

Yes