SAFETY DATA SHEET

1. Identification

Product identifier Lectra-Motive™ Electric Parts Cleaner

Other means of identification

No. 75022 (Item# 1006293) Product code Recommended use Electrical parts cleaner

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufactured or sold by:

CRC Canada Co. Company name 2-1246 Lorimar Drive **Address**

Mississauga, Ontario L5S 1R2

Canada

Telephone

905-670-2291 **General Information**

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 Not classified.

Health hazards Skin corrosion/irritation Category 2

> Serious eye damage/eye irritation Category 2B Sensitization, skin Category 1B Carcinogenicity (inhalation) Category 1B

Specific target organ toxicity, single exposure Category 3 narcotic effects

Environmental hazards Hazardous to the aquatic environment, acute Category 2

hazard

Hazardous to the aquatic environment, Category 2

long-term hazard

Label elements



Signal word Danger

Causes skin irritation. May cause an allergic skin reaction. Causes eye irritation. May cause **Hazard statement**

drowsiness or dizziness. May cause cancer by inhalation. 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. Avoid breathing mist or vapor. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Avoid release to the environment.

Material name: Lectra-Motive™ Electric Parts Cleaner

SDS CANADA No. 75022 (Item# 1006293) Version #: 01 Issue date: 08-05-2016

IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical Response

> advice/attention. Take off contaminated clothing and wash it 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. 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/international regulations.

Other hazards None known.

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

Mixtures

Chemical name	Common name and synonyms	CAS number	%
tetrachloroethylene	perchloroethylene	127-18-4	80 - 100

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 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.

Remove contaminated clothing immediately and wash skin with soap and water. In case of Skin contact

eczema or other skin disorders: Seek medical attention and take along these instructions. Wash

contaminated clothing before reuse.

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately. Ingestion

Do not induce vomiting without advice from poison control center.

Most important

symptoms/effects, acute and

delaved

Indication of immediate medical attention and special treatment needed

General information

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

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. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Specific hazards arising from the chemical

Special protective equipment and precautions for firefighters

Fire fighting

equipment/instructions

Specific methods General fire hazards Use fire-extinguishing media appropriate for surrounding materials.

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

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

corrosive gases such as hydrogen chloride and possibly phosgene.

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

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

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

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. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing 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

Prevent entry into waterways, sewer, basements or confined areas.

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. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. 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.

Value

Conditions for safe storage, including any incompatibilities

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

8. Exposure controls/personal protection

Occupational	ovnosuro	limite
Occubational	exposure	IIIIIIIII

Components

US. ACGIH TH	hreshold l	۱ Limit	Values
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Components	туре	value	
tetrachloroethylene (CAS 127-18-4)	STEL	100 ppm	
	TWA	25 ppm	
Canada. Alberta OELs (Occupation	onal Health & Safety Code, Sc	hedule 1, Table 2)	
Components	Туре	Value	
totrachlaroothylana (CAS	QTEI .	678 mg/m3	

•	• •	
tetrachloroethylene (CAS 127-18-4)	STEL	678 mg/m3
121 10 1,	TWA	100 ppm 170 mg/m3
		25 nnm

Type

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	туре	value
tetrachloroethylene (CAS 127-18-4)	STEL	100 ppm
,	TWA	25 ppm

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

Components	Туре	Value
tetrachloroethylene (CAS 127-18-4)	STEL	100 ppm
- ,	TWA	25 ppm

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

Components	Туре	Value
tetrachloroethylene (CAS 127-18-4)	STEL	100 ppm
,	TWA	25 ppm

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

	- 7 -	
tetrachloroethylene (CAS 127-18-4)	STEL	685 mg/m3
		100 ppm
	TWA	170 mg/m3

Material name: Lectra-Motive™ Electric Parts Cleaner

SDS CANADA

Biological limit values

ACGIH	Biological	Exposure	Indices
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Components	Value	Determinant	Specimen	Sampling Time
tetrachloroethylene (CAS 127-18-4)	0.5 mg/l	Tetrachloroethy lene	Blood	*
	3 ppm	Tetrachloroethy lene	End-exhaled air	*

^{* -} 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. Eye wash facilities and emergency shower should be available when handling this product.

25 ppm

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). Ethyl vinyl alcohol laminate (EVAL).

Silver Shield® Viton®.

Wear appropriate chemical resistant clothing. Wear suitable protective clothing. Other

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

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. Liquid. **Form** Color Colorless. Odor Irritating. 50 ppm **Odor threshold** pН Not available.

-8.1 °F (-22.3 °C) estimated Melting point/freezing point Initial boiling point and boiling 250.3 °F (121.3 °C) estimated

range

Flash point None (Tag Closed Cup)

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

Flammability limit - lower

Not available.

(%)

Flammability limit - upper

Not available.

(%)

Vapor pressure 13 mm Hg (68 °F (20 °C))

Vapor density 5.76 (air = 1)

Relative density 1.62

Solubility(ies)

Solubility (water) 0.02 % (77 °F (25 °C))

No. 75022 (Item# 1006293) Version #: 01 Issue date: 08-05-2016

Partition coefficient (n-octanol/water)

2.88

Auto-ignition temperature Not available. **Decomposition temperature** Not available. **Viscosity** Not available.

Other information

100 % estimated Percent volatile

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Material is stable under normal conditions. **Chemical stability**

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 chloride and possibly phosgene. Contact with

incompatible materials.

Incompatible materials Strong oxidizing agents. Strong acids. Strong bases. Oxygen. Peroxides. Powdered metal.

Hazardous decomposition

products

Carbon oxides. Hydrogen chloride. Chlorine. Phosgene.

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause drowsiness and dizziness. Headache. Nausea, vomiting.

Skin contact Causes skin irritation. May cause an allergic skin reaction.

Eye contact Causes eye irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics May cause drowsiness and dizziness. Headache. Nausea, vomiting. Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Skin irritation. May cause

redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Narcotic effects. May cause an allergic skin reaction. **Acute toxicity**

Components Species Test Results

tetrachloroethylene (CAS 127-18-4)

Acute Dermal

Rabbit LD50 > 3228 mg/kg

Oral

Rat LD50 2629 mg/kg

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

Causes skin irritation. Skin corrosion/irritation Causes eye irritation. Serious eye damage/eye

irritation

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization May cause an allergic skin reaction.

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.

ACGIH Carcinogens

tetrachloroethylene (CAS 127-18-4) A3 Confirmed animal carcinogen with unknown relevance to

humans.

Canada - Manitoba OELs: carcinogenicity

tetrachloroethylene (CAS 127-18-4) Confirmed animal carcinogen with unknown relevance to humans.

Canada - Quebec OELs: Carcinogen category

tetrachloroethylene (CAS 127-18-4) Detected carcinogenic effect in animals.

Material name: Lectra-Motive™ Electric Parts Cleaner

No. 75022 (Item# 1006293) Version #: 01 Issue date: 08-05-2016

SDS CANADA

IARC Monographs. Overall Evaluation of Carcinogenicity

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

US. National Toxicology Program (NTP) Report on Carcinogens

tetrachloroethylene (CAS 127-18-4) Reasonably Anticipated to be a Human Carcinogen.

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

Specific target organ toxicity -

May cause drowsiness and dizziness.

single exposure

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged exposure may cause chronic effects.

12. Ecological information

Toxic to aquatic life with long lasting effects. **Ecotoxicity**

Components **Species Test Results** tetrachloroethylene (CAS 127-18-4)

Aquatic

Fish LC50 Rainbow trout, donaldson trout 4.73 - 5.27 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)

Lectra-Motive™ Electric Parts Cleaner 2.88 tetrachloroethylene 2.88

No data available. Mobility in soil

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. 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/international 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

UN1897 **UN** number

UN proper shipping name TETRACHLOROETHYLENE, MARINE POLLUTANT

Transport hazard class(es)

6.1(PGIII) Class

Subsidiary risk Packing group Ш **Environmental hazards** Yes.

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

IATA

UN number UN1897

Tetrachloroethylene **UN proper shipping name**

No. 75022 (Item# 1006293) Version #: 01 Issue date: 08-05-2016

Transport hazard class(es)

6.1(PGIII) **Class**

Subsidiary risk Ш Packing group

Material name: Lectra-Motive™ Electric Parts Cleaner

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

Environmental hazards Yes. **ERG Code** 6L

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

Other information

Passenger and cargo Allowed with restrictions.

aircraft

Cargo aircraft only Allowed with restrictions.

IMDG

UN number UN1897

UN proper shipping name TETRACHLOROETHYLENE, MARINE POLLUTANT

Not established.

Transport hazard class(es)

Class 6.1(PGIII)

Subsidiary risk - Packing group |||

Environmental hazards

Marine pollutant Yes. EmS F-A, S-A

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 the IBC Code

15. Regulatory information

Canadian regulations

Canada. Excluded VOCs. Guidelines for Volatile Organic Compounds in Consumer Products. CEPA 1999. Environment Canada, as amended

tetrachloroethylene (CAS 127-18-4)

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed

Greenhouse Gases

Not listed.

Ontario. Toxic Substances. Toxic Reduction Act, 2009. Regulation 455/09 (July 1, 2011)

tetrachloroethylene (CAS 127-18-4)

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)	Yes

Country(s) or region Inventory name On inventory (yes/no)* Europe European List of Notified Chemical Substances (ELINCS) Inventory of Existing and New Chemical Substances (ENCS) Japan Yes Existing Chemicals List (ECL) Korea Yes New Zealand New Zealand Inventory Yes Philippine Inventory of Chemicals and Chemical Substances **Philippines** Yes (PICCS)

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

Disclaimer

Issue date 08-05-2016

Version # 01

United States & Puerto Rico

Further information CRC # 491G/1002481

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