SAFETY DATA SHEET

1. Identification

Product identifier Lectra Clean® Heavy Duty Electrical Parts Degreaser

Other means of identification

No. 02023 (Item# 1003183) **Product Code** Recommended use Energized electrical cleaner

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufactured or sold by:

CRC Industries. Inc. Company name 885 Louis Dr. **Address**

Warminster, PA 18974 US

Telephone

215-674-4300 **General Information Technical Assistance** 800-521-3168 **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 2B Sensitization, skin Category 1B Carcinogenicity 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

OSHA defined hazards Not classified.

Label elements



Signal word

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

drowsiness or dizziness. May cause cancer. 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. Avoid breathing mist or vapor. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.

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If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Response

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. 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.

Supplemental information

When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen fluoride, hydrogen chloride, and possibly phosgene.

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|---------------------|--------------------------|-------------|----------|
| tetrachloroethylene | perchloroethylene | 127-18-4 | 90 - 100 |
| decafluoropentane | HFC 43-10mee | 138495-42-8 | < 1 |

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 immediately and wash skin with soap and water. In case of

eczema or other skin disorders: Seek medical attention and take along these instructions. 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. If eye irritation persists: Get medical advice/attention.

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Skin irritation. May cause

Rinse mouth. Get medical attention if symptoms occur. Ingestion

Most important

symptoms/effects, acute and delayed

Indication of immediate

General information

medical attention and special treatment needed

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

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

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

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

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 fluoride, 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

General fire hazards

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

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

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.

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. Avoid prolonged exposure. 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, see the product label.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry place out of direct sunlight. Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

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-2 (29 CFR 1910.1000)

| Components | Туре | Value | |
|---|---------|---------|--|
| tetrachloroethylene (CAS 127-18-4) | Ceiling | 200 ppm | |
| , | TWA | 100 ppm | |
| US. ACGIH Threshold Limit Values | | | |
| Components | Туре | Value | |
| 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 | Tetrachloroethy lene | Blood | * |
| | 3 ppm | Tetrachloroethy lene | End-exhaled air | * |

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

Exposure guidelines

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 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: Nitrile. Viton/butyl. Polyvinyl alcohol (PVA). Silver Shield®

Other Wear appropriate chemical resistant clothing.

If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a Respiratory protection

> 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.

Wear appropriate thermal protective clothing, when necessary. Thermal hazards

General hygiene considerations

Observe any medical surveillance requirements. When using do not 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. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

Liquid. **Physical state** Liquid. **Form** Color Colorless. Odor Irritating. **Odor threshold** 50 ppm 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

None (Tag Closed Cup)

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

Flammability limit - lower

Not applicable.

Flash point

Flammability limit - upper

Not applicable.

(%)

18.8 hPa estimated Vapor pressure

5.76 (air = 1)Vapor density

1.62 Relative density

Not available. Solubility (water) **Partition coefficient** Not available. (n-octanol/water)

Not available. Auto-ignition temperature Not available. **Decomposition temperature** Not available. Viscosity (kinematic) 100 % estimated Percent volatile

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.

Heat, flames and sparks. Contact with incompatible materials. When exposed to extreme heat or Conditions to avoid

hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen

fluoride, hydrogen chloride, and possibly phosgene.

Strong oxidizing agents. Strong acids. Strong bases. Incompatible materials

Hazardous decomposition

products

Hydrogen fluoride. Hydrogen chloride. Trace amounts of chlorine and phosgene. Carbon oxides.

Halogenated materials. Carbonyl halides.

SDS US

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be

harmful.

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

Causes eye irritation. Eye contact

Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, Ingestion

and diarrhea.

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

Not known. **Acute toxicity**

Product Species Test Results

Lectra Clean® Heavy Duty Electrical Parts Degreaser

Acute Dermal

ATFmix 3244.2253 mg/kg

Oral

ATEmix 2642.2173 mg/kg

Test Results Components **Species**

decafluoropentane (CAS 138495-42-8)

Acute Dermal

LD50 Rabbit > 5000 mg/kg

Inhalation

LC50 Rat 11058 mg/kg, 4 hours calculated

Oral

LD50 > 5000 mg/kg Rat

tetrachloroethylene (CAS 127-18-4)

Acute

Dermal

LD50 Rabbit > 3228 mg/kg

Oral

LD50 Rat 2629 mg/kg

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

irritation

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization May cause an allergic skin reaction.

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

mutagenic or genotoxic.

Carcinogenicity May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

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

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

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

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

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SDS US

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

Specific target organ toxicity -

single exposure

May cause drowsiness and dizziness.

Specific target organ toxicity -

repeated exposure

Not classified.

Not an aspiration hazard. **Aspiration hazard**

Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. **Chronic effects**

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

| Components | | Species | Test Results |
|------------------------|-----------------|---|----------------------------|
| decafluoropentane (C | AS 138495-42-8) | | |
| Aquatic | | | |
| Acute | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 11.7 mg/l, 48 hours |
| Fish | LC50 | Zebra danio (Danio rerio) | 13 mg/l, 96 hours |
| tetrachloroethylene (C | AS 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

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

decafluoropentane 2.7, Pow at 20 °C

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 This material and its container must be disposed of as hazardous waste. Consult authorities before disposal. 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.

D039: Waste Tetrachloroethylene Hazardous waste code

F001: Waste Tetrachloroethylene - Spent halogenated solvent used in degreasing

F002: Waste Tetrachloroethylene - Spent halogenated solvent

US RCRA Hazardous Waste U List: Reference

tetrachloroethylene (CAS 127-18-4) 11210

Empty containers should be taken to an approved waste handling site for recycling or disposal. Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

14. Transport information

DOT

UN number UN1897

Tetrachloroethylene mixture, MARINE POLLUTANT **UN** proper shipping name

Transport hazard class(es)

Class 6.1(PGIII)

Subsidiary risk Packing group Ш

Environmental hazards

Marine pollutant Yes

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

Special provisions IB3, N36, T4, TP1

153 Packaging exceptions Packaging non bulk 203

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Packaging bulk 241

IATA

UN number UN1897

Tetrachloroethylene mixture UN proper shipping name

Transport hazard class(es)

6.1(PGIII) Class

Subsidiary risk Ш Packing group 6L **ERG Code**

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

TETRACHLOROETHYLENE MIXTURE. MARINE POLLUTANT **UN** proper shipping name

Transport hazard class(es)

6.1(PGIII) Class

Subsidiary risk Ш 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.

15. Regulatory information

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication **US federal regulations**

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)

decafluoropentane (CAS 138495-42-8) 1.0 % One-Time Export Notification only.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

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) Listed.

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

Not regulated.

(SDWA)

Food and Drug Not regulated.

Administration (FDA)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Immediate Hazard - Yes Section 311/312 Delayed Hazard - Yes **Hazard categories**

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

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US state regulations

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

(a))

tetrachloroethylene (CAS 127-18-4)

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

tetrachloroethylene (CAS 127-18-4)

US. Massachusetts RTK - Substance List

tetrachloroethylene (CAS 127-18-4)

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

tetrachloroethylene (CAS 127-18-4)

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.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

tetrachloroethylene (CAS 127-18-4) Listed: April 1, 1988

Volatile organic compounds (VOC) regulations

EPA

VOC content (40 CFR

0 %

51.100(s))

Consumer products (40 CFR 59, Subpt. C)

Not regulated

Inventory name

State

Consumer products

This product is regulated as an Energized Electrical Cleaner for the following states: California, Connecticut, Delaware, District of Columbia, Illinois, Indiana, Maine, Maryland, Massachusetts, Michigan, New Jersey, New York, Ohio, Pennsylvania, Rhode Island and Virginia. It is for energized equipment use only. It is not to be used for motorized vehicle maintenance or their parts. This product is compliant for use in all 50 states.

VOC content (CA) 0 % VOC content (OTC) 0 %

International Inventories

Country(s) or region

| 3 \(\) | • | J 13 | , |
|-----------------------------|--|------|-----|
| 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) | | 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

No. 02023 (Item# 1003183) Version #: 04 Revision date: 11-01-2017 Issue date: 11-01-2017

Issue date11-01-2017Revision date11-01-2017Prepared byAllison Yoon

Version # 04

Material name: Lectra Clean® Heavy Duty Electrical Parts Degreaser

SDS US

On inventory (yes/no)*

8/9

Further information CRC # 863A/1002837

HMIS® ratings Health: 2*

Flammability: 0 Physical hazard: 0 Personal protection: B

NFPA ratings Health: 2

Flammability: 0 Instability: 0

NFPA ratings



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