Section 1: Product & Company Identification

Product Name:

Battery Terminal Protector (aerosol)

Product Number (s): V

03175, 83175

Product Use:

Battery Terminal Protector

Manufacturer / Supplier Contact Information:

In United States:

In Canada:

CRC Industries, Inc.

CRC Canada Co.

885 Louis Drive

2-1246 Lorimar Drive

Warminster, PA 18974

Mississauga. Ontario L5S 1R2

www.crcindustries.com

www.crc-canada.ca

1-215-674-4300(General)

San Luís Potosí, SLP CP 78394

Av. Benito Juárez 4055 G

CRC Industries Mexico

(800) 521-3168 (Technical)

1-905-670-2291

www.crc-mexico.com 52-444-824-1666

Colonia Orquídea

In Mexico:

(800) 272-4620 (Customer Service)

24-Hr Emergency - CHEMTREC: (800) 424-9300 or (703) 527-3887

Section 2: Hazards Identification

Emergency Overview

DANGER: Extremely Flammable. Harmful or Fatal if Swallowed. Contents Under Pressure.

Appearance & Odor: Dark red viscous liquid with petroleum solvent odor

Potential Health Effects:

ACUTE EFFECTS:

EYE: May cause mild to moderate irritation including stinging, tearing and redness.

Single, brief exposures may cause mild irritation. Frequent or prolonged contact may cause more

severe irritation, defatting of the skin, and dermatitis.

INHALATION: High vapor concentrations are irritating to the mucous membranes and upper respiratory tract and may

cause headaches, dizziness, anesthesia, drowsiness, unconsciousness and other central nervous system effects, including death. May cause peripheral nervous system disorder and/or damage.

INGESTION:

Low order of toxicity by ingestion. May cause irritation of the gastrointestinal lining and nausea. Main

hazard is aspiration into the lungs during swallowing or vomiting. Small amounts aspirated into the respiratory system may cause bronchopneumonia or pulmonary adema, possibly progressing to death.

CHRONIC EFFECTS:

Overexposure to n-hexane may cause progressive and potentially irreversible damage to the

peripheral nervous system, particularly in the arms and legs.

TARGET ORGANS:

central nervous system, peripheral nervous system, respiratory system

Medical Conditions Aggravated by Exposure: skin and respiratory conditions

See Section 11 for toxicology and carcinogenicity information on product ingredients.

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Section 3: Composition/Information on Ingredients

COMPONENT	CAS NUMBER	% by Wt.	
Heptane	142-82-5	50 – 60	
Liquefied petroleum gas	68476-86-8	25 - 35	
Hexane isomers	64742-49-0 / 107-83-5	15 – 25	
Petrolatum	8009-03-8	10 – 20	
Xylene	1330-20-7	2 – 5	
Solvent-refined paraffinic distillates	64741-88-4	2 – 5	
Ethylbenzene	100-41-4	0.8	
n-Hexane	110-54-3	0.4	

Section 4: First Aid Measures

Eye Contact: Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.

Skin Contact: Remove contaminated clothing and wash affected area with soap and water. Call a physician if

irritation persists. Wash contaminated clothing prior to re-use.

Inhalation: Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If

breathing is difficult give oxygen. Call a physician.

Ingestion: Do NOT induce vomiting. Contact a physician immediately. If victim is conscious, give 2 glasses

of water.

Note to Physicians: Treat symptomatically. This product is an aspiration hazard. Gastric lavage using a cuffed

endotracheal tube may be performed at your discretion.

Section 5: Fire-Fighting Measures

Flammable Properties: This product is extremely flammable in accordance with aerosol flammability definitions.

(See 16 CFR 1500.3(c)(6)).

Flash Point: < 0°F / < -18°C (TCC)

Upper Explosive Limit: 8 (estimate)

Autoignition Temperature: 489°F / 254°C

Lower Explosive Limit: 1 (estimate)

Fire and Explosion Data:

Suitable Extinguishing Media:

Class B fire extinguishers, dry chemical, foam or CO²

Products of Combustion: Fumes, smoke and carbon monoxide

Explosion Hazards: Aerosol containers, when exposed to heat from fire, may build pressure and explode. Vapors

may accumulate in a confined space and create a flammable atmosphere.

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for

protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition. Do not spray

water directly on fire; product will float and could be reignited on surface of water.

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Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8.

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush into

sewers or storm drains.

Methods for Containment & Clean-up: Dike area to contain spill. Remove all sources of ignition. Ventilate the area with

fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents

into proper waste containers.

Section 7: Handling and Storage

Handling Procedures: Do not use product near any potential source of ignition. Avoid contact with eyes and skin.

Avoid breathing vapors. Wash thoroughly after handling and before contacting food. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. For

product use instructions, please see the product label.

Storage Procedures: Store in a cool dry area out of direct sunlight. Aerosol cans must be maintained below 120°F /

49°C to prevent cans from rupturing. Do not store near potential sources of ignition.

Aerosol Storage Level: III

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines:

	OSHA		ACGIH		OTHER		
COMPONENT	TWA	STEL	TWA	STEL	TWA	SOURCE	UNIT
Heptane	500	NE	400	500	NE		ppm
Liquefied petroleum gas	1000	NE	1000	NE	NE		ppm
Hexane isomers	500(v)	1000(v)	500	1000	NE		ppm
Petrolatum	NE	NE	NE	NE	NE		
Xylene	100	NE	100	150	NE	-	ppm
Solvent-refined paraffinic distillates	5	NE	5	10	NE		mg/m ³
Ethylbenzene	100	NE	20	NE	NE		ppm
n-Hexane	500	NE	50(s)	NE	NE		ppm
N.E. – Not Established (c) – ceiling (s) – skin (v) – vacated							

Controls and Protection:

Engineering Controls: Area should have ventilation to provide fresh air. Local exhaust ventilation is generally

preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA

regulations.

Respiratory Protection: None required for normal work where adequate ventilation is provided. If engineering controls

are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved

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cartridge respirator with organic vapor cartridge. Air monitoring is needed to determine actual employee exposure levels. Use a self-contained breathing apparatus in confined spaces and

for emergencies.

Eye/face Protection:

For normal conditions, wear safety glasses. Where there is reasonable probability of liquid

contact, wear splash-proof goggles.

Skin Protection:

Use protective gloves such as nitrile, PVC or Viton®. Also, use full protective clothing if there is

prolonged or repeated contact of liquid with skin.

Section 9: Physical and Chemical Properties

Physical State:

Color:

Odor:

liquid dark red, viscous petroleum solvent

Odor Threshold:

ND

Specific Gravity:

0.727

Initial Boiling Point:

118°F / 48°C

Freezing Point:

ND

Vapor Pressure:

ND

Vapor Density:

(air = 1)

Evaporation Rate:

> 1 fast

Solubility:

negligible in water

Coefficient of water/oil distribution:

ND

NA :Hq

Volatile Organic Compounds:

wt %: 86.3

627.4 g/L:

lbs./gal:

5.23

Section 10: Stability and Reactivity

Stability:

Stable

Conditions to Avoid:

Sources of ignition, temperature extremes

Incompatible Materials:

Strong oxidizers

Hazardous Decomposition Products:

Oxides of carbon, aldehydes and other products of incomplete combustion

Possibility of Hazardous Reactions:

No

Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

Acute Toxicity:

Component	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 (rat)	
Heptane	No data	No data	103 g/m ³ /4H	
Liquefied petroleum gas	No data	No data	No data	
Hexane isomers	No data	No data	No data	
Petrolatum	> 5 g/kg	> 2 g/kg	No data	
Xylene	4300 mg/kg	> 1700 mg/kg	5000 ppm/4H	
Solvent-refined paraffinic distillates	No data	No data	No data	
Ethylbenzene	3500 mg/kg	> 5000 mg/kg	55,000 mg/m ³ /2H	
n-Hexane	28,710 mg/kg	3000 mg/kg	48,000 ppm/4H	

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Chronic Toxicity:

	OSHA	IARC	NTP		
Component	Carcinogen	Carcinogen	Carcinogen	<u>Irritant</u>	Sensitizer
Heptane	No	No	No	Skin	No
Liquefied petroleum gas	No	No	No	No	No
Hexane isomers	No	No	No	No	Unknown
Petrolatum	No	No	No	No	Unknown
Xylene	No	No	No	Skin	No
Solvent-refined paraffinic distillates	No	No	No	No	Unknown
Ethylbenzene	No	Group 2B	No	Eye, Skin	Unknown
n-Hexane	No	No	No	Skin	No

Reproductive Toxicity:
Teratogenicity:
Mutagenicity:
Synergistic Effects:
No information available
No information available
No information available

Section 12: Ecological Information

Ecological studies have not been conducted for this product. The following information is available for components of this product.

Ecotoxicity: n-Hexane - 96 Hr LC50 Lepomis macrochirus: 4.12 mg/L

Xylene - 96 Hr LC50 Oncorhynchus mykiss: 13.5 - 17.3 mg/L

Ethylbenzene – 96Hr LC50 Pimephales promelas: 12.1 mg/L (flow-through)

Persistence / Degradability:

No information available

Bioaccumulation / Accumulation:

No information available

Mobility in Environment:

No information available

Section 13: Disposal Considerations

Waste Classification: The dispensed liquid product is a RCRA hazardous waste for the characteristic of ignitability

with a waste code of D001. (See 40 CFR Part 261.20 – 261.33)

Empty aerosol containers may be recycled. Any liquid product should be managed as a

hazardous waste.

All disposal activities must comply with federal, state, provincial and local regulations. Local regulations may be more stringent than state, provincial or national requirements.

Section 14: Transport Information

US DOT (ground): UN1950, Aerosols, flammable, 2.1, Limited Quantity**

ICAO/IATA (air): UN1950, Aerosols, flammable, 2.1, Limited Quantity

IMO/IMDG (water): UN1950, Aerosols, 2.1, Limited Quantity

Special Provisions: **This product can be classified and labeled as 'Consumer Commodity, ORM-D' for domestic

ground shipping until December 31, 2020.

If shipping as limited quantity by ground, note that shipping papers are not required.

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Section 15: Regulatory Information

U.S. Federal Regulations:

Toxic Substances Control Act (TSCA):

All ingredients are either listed on the TSCA inventory or are exempt.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Xylene (100 lbs), Ethylbenzene (1000 lbs), Reportable Quantities (RQ's) exist for the following ingredients:

n-hexane (5000 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.

Superfund Amendments Reauthorization Act (SARA) Title III:

Section 302 Extremely Hazardous Substances (EHS):

None

Section 311/312 Hazard Categories:

Fire Hazard Yes Reactive Hazard No Release of Pressure Yes Acute Health Hazard Yes Chronic Health Hazard Yes

Section 313 Toxic Chemicals:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of

1986 and 40 CFR Part 372:

hexane (0.4%), Xylene (3.1%), Ethylbenzene (0.8%)

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs): n-hexane, Xylene, Ethylbenzene

Occupational Safety and Health Administration:

This product is regulated by the Hazard Communications Standard.

U.S. State Regulations:

California Safe Drinking Water and Toxic Enforcement Act (Prop 65):

This product may contain the following chemicals known to the state of

California to cause cancer, birth defects or other reproductive harm:

Ethylbenzene

Consumer Products VOC Regulations: This product is not regulated.

State Right to Know:

New Jersev: 75-83-2, 110-54-3, 79-29-8, 68476-86-8, 1330-20-7, 142-82-5, 100-41-4

Pennsylvania: 107-83-5, 75-83-2, 110-54-3, 79-29-8, 68476-86-8, 1330-20-7, 142-82-5, 100-41-4 107-83-5, 75-83-2, 110-54-3, 79-29-8, 68476-86-8, 1330-20-7, 142-82-5, 100-41-4 Massachusetts:

110-54-3, 68476-86-8, 1330-20-7, 142-82-5, 100-41-4 Rhode Island:

Canadian Regulations:

Controlled Products Regulations:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Hazard Class: A, B5, D2A, D2B

All ingredients are either listed on the DSL Inventory or are exempt. Canadian DSL Inventory:

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European Union Regulations:

RoHS Compliance:

This product is compliant with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003. This product does not contain any of the restricted substances as

listed in Article 4(1) of the RoHS Directive.

Additional Regulatory Information:

None

Section 16: Other Information

HMIS® (II)		
Health:	2	
Flammability:	3	
Reactivity:	0	
PPE:	В	

Ratings range from 0 (no hazard) to 4 (severe hazard)

NFPA 0

Prepared By:

Michelle Rudnick

CRC #:

597P/Q

Revision Date:

02/13/2013

Changes since last revision:

Formula change

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 Industries' 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 MSDS consult your supervisor, a health & safety professional, or CRC Industries.

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstract Service CFR: Code of Federal Regulations Department of Transportation DOT: Domestic Substance List DSL:

grams per Liter g/L:

Hazardous Materials Identification System HMIS: International Agency for Research on Cancer IARC: International Air Transport Association IATA: International Civil Aviation Organization ICAO: International Maritime Dangerous Goods IMDG:

International Maritime Organization IMO:

lbs./gal: pounds per gallon LC: Lethal Concentration

Lethal Dose LD:

NA: Not Applicable Not Determined ND:

NIOSH: National Institute of Occupational Safety & Health

National Fire Protection Association NFPA:

National Toxicology Program NTP:

OSHA: Occupational Safety and Health Administration

PMCC: Pensky-Martens Closed Cup PPE: Personal Protection Equipment

ppm: Parts per Million

Restriction of Hazardous Substances RoHS:

Short Term Exposure Limit STEL:

TCC: Tag Closed Cup

Time Weighted Average TWA:

WHMIS: Workplace Hazardous Materials Information

System