SAFETY DATA SHEET

1. Identification

Product identifier Battery Terminal Protector

Other means of identification

05046 Product code

Recommended use Battery terminal protector

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

CRC Industries. Inc. Company name

Address 885 Louis Dr.

Warminster, PA 18974 US

Telephone

215-674-4300 **General Information Technical** 800-521-3168

Assistance

800-272-4620 **Customer Service** 24-Hour Emergency 800-424-9300 (US)

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

2. Hazard(s) identification

Physical hazards Flammable aerosols Category 1

> Gases under pressure Liquefied gas Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2A

Carcinogenicity Category 2 Reproductive toxicity (fertility) Category 2

Specific target organ toxicity, single exposure Category 3 narcotic effects

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

exposure (oral)

Aspiration hazard Category 1

Environmental hazards Hazardous to the aquatic environment, acute Category 1

hazard

Hazardous to the aquatic environment,

long-term hazard

OSHA defined hazards Not classified.

Label elements

Health hazards



Signal word Danger

Extremely flammable aerosol. Contains gas under pressure; may explode if heated. May be fatal if **Hazard statement**

> swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of causing cancer. Suspected of damaging fertility. May cause damage to organs (central nervous system, kidney, liver) through prolonged or repeated exposure by ingestion. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Category 1

Material name: Battery Terminal Protector 05046 Version #: 03 Revision date: 12-21-2016 Issue date: 10-21-2013

Precautionary statement

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not apply while equipment is energized. Extinguish all flames, pilot lights and heaters. Vapors will accumulate readily and may ignite. Use only with adequate ventilation; maintain ventilation during use and until all vapors are gone. 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.

Response

If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical 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 attention. If exposed or concerned: Get medical attention. Collect spillage.

Storage

Store in a well-ventilated place. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Exposure to high temperature may cause can to burst.

Disposal

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

Hazard(s) not otherwise classified (HNOC)

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
liquefied petroleum gas		68476-86-8	20 - 30
n-heptane		142-82-5	10 - 20
petrolatum		8009-03-8	10 - 20
2-methylpentane		107-83-5	5 - 10
3-methylhexane		589-34-4	5 - 10
naphtha (petroleum), hydrotreated light		64742-49-0	5 - 10
2-methylhexane		591-76-4	3 - 5
heptane, branched, cyclic and linear		426260-76-6	3 - 5
methylcyclohexane		108-87-2	3 - 5
solvent naphtha (petroleum), light aliph.		64742-89-8	3 - 5
3-ethylpentane		617-78-7	1 - 3
ethylbenzene		100-41-4	1 - 3
n-hexane		110-54-3	1 - 3
paraffin oils (petroleum), catalytic dewaxed heavy		64742-70-7	1 - 3
xylene		1330-20-7	1 - 3
3,3-dimethylpentane		562-49-2	< 1
toluene		108-88-3	< 0.3

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

Most important symptoms/effects, acute and delayed

Indication of immediate medical attention and special treatment needed

General information

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Aspiration may cause pulmonary edema and pneumonitis. 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. Skin irritation. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. 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

Water fog. Foam. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable extinguishing media

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

Specific hazards arising from the chemical

Contents under pressure. Pressurized container may rupture when exposed to heat or flame. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.

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

Fire-fighting equipment/instructions General fire hazards

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.

Extremely flammable aerosol. 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. Remove all possible sources of ignition in the surrounding area. 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. Do not breathe mist or vapor. 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. Use appropriate containment to avoid environmental contamination. 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 Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Prevent product from entering drains. Stop the flow of material, if this is without risk. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. 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. Use appropriate containment to avoid environmental contamination.

Material name: Battery Terminal Protector

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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. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. 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. 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. 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. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. 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

Level 3 Aerosol.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Avoid spark promoters. These alone may be insufficient to remove static electricity. Store in a well-ventilated place. 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.

Components	Туре	Value	Form	
ethylbenzene (CAS 100-41-4)	PEL	435 mg/m3		
		100 ppm		
methylcyclohexane (CAS 108-87-2)	PEL	2000 mg/m3		
,		500 ppm		
naphtha (petroleum), hydrotreated light (CAS 64742-49-0)	PEL	400 mg/m3		
		100 ppm		
n-heptane (CAS 142-82-5)	PEL	2000 mg/m3		
		500 ppm		
n-hexane (CAS 110-54-3)	PEL	1800 mg/m3		
		500 ppm		
paraffin oils (petroleum), catalytic dewaxed heavy (CAS 64742-70-7)	PEL	5 mg/m3	Mist.	
petrolatum (CAS 8009-03-8)	PEL	5 mg/m3	Mist.	
solvent naphtha	PEL	400 mg/m3		
(petroleum), light aliph. (CAS 64742-89-8)				
,		100 ppm		
xylene (CAS 1330-20-7)	PEL	435 mg/m3		
•		100 ppm		
US. OSHA Table Z-2 (29 CFR 1910.	1000)			
Components	Туре	Value		
toluene (CAS 108-88-3)	Ceiling	300 ppm		
	TWA	200 ppm		

Components	Туре	Value	Form
2-methylhexane (CAS 91-76-4)	STEL	500 ppm	
991-70-4)	TWA	400 ppm	
e-methylpentane (CAS	STEL	1000 ppm	
07-83-5)	SIEL	тооо ррш	
,	TWA	500 ppm	
3,3-dimethylpentane (CAS	STEL	500 ppm	
662-49-2)	TWA	400 ppm	
-ethylpentane (CAS	STEL	500 ppm	
617-78-7)	0.22	ооо ррни	
	TWA	400 ppm	
-methylhexane (CAS 89-34-4)	STEL	500 ppm	
	TWA	400 ppm	
ethylbenzene (CAS 00-41-4)	TWA	20 ppm	
nethylcyclohexane (CAS 08-87-2)	STEL	500 ppm	
- ,	TWA	400 ppm	
n-heptane (CAS 142-82-5)	STEL	500 ppm	
	TWA	400 ppm	
ı-hexane (CAS 110-54-3)	TWA	50 ppm	
paraffin oils (petroleum),	TWA	5 mg/m3	Inhalable fraction.
catalytic dewaxed heavy CAS 64742-70-7)	1007	o mg/mo	milable faction.
petrolatum (CAS 3009-03-8)	TWA	5 mg/m3	Inhalable fraction.
oluene (CAS 108-88-3)	TWA	20 ppm	
ylene (CAS 1330-20-7)	STEL	150 ppm	
y.c.i.e (e/i.e 1666 26 1)	TWA	100 ppm	
		100 pp	
IS NIOSH: Pocket Guide to Cher	nical Hazards		
	nical Hazards Type	Value	Form
Components	Туре		Form
US. NIOSH: Pocket Guide to Cher Components P-methylpentane (CAS 07-83-5)		1800 mg/m3	Form
Components 2-methylpentane (CAS	Type Ceiling	1800 mg/m3 510 ppm	Form
e-methylpentane (CAS	Туре	1800 mg/m3 510 ppm 350 mg/m3	Form
-methylpentane (CAS	Type Ceiling	1800 mg/m3 510 ppm	Form
ethylbenzene (CAS	Type Ceiling	1800 mg/m3 510 ppm 350 mg/m3	Form
e-methylpentane (CAS 07-83-5)	Type Ceiling TWA	1800 mg/m3 510 ppm 350 mg/m3 100 ppm 545 mg/m3	Form
ethylbenzene (CAS	Type Ceiling TWA STEL	1800 mg/m3 510 ppm 350 mg/m3 100 ppm 545 mg/m3 125 ppm	Form
ethylbenzene (CAS	Type Ceiling TWA	1800 mg/m3 510 ppm 350 mg/m3 100 ppm 545 mg/m3 125 ppm 435 mg/m3	Form
e-methylpentane (CAS 07-83-5) ethylbenzene (CAS 00-41-4)	Type Ceiling TWA STEL TWA	1800 mg/m3 510 ppm 350 mg/m3 100 ppm 545 mg/m3 125 ppm 435 mg/m3 100 ppm	Form
ethylbenzene (CAS	Type Ceiling TWA STEL	1800 mg/m3 510 ppm 350 mg/m3 100 ppm 545 mg/m3 125 ppm 435 mg/m3 100 ppm 1600 mg/m3	Form
e-methylpentane (CAS 07-83-5) ethylbenzene (CAS 00-41-4) nethylcyclohexane (CAS 08-87-2)	Type Ceiling TWA STEL TWA TWA	1800 mg/m3 510 ppm 350 mg/m3 100 ppm 545 mg/m3 125 ppm 435 mg/m3 100 ppm 1600 mg/m3 400 ppm	Form
e-methylpentane (CAS 07-83-5) ethylbenzene (CAS 00-41-4) methylcyclohexane (CAS 08-87-2) maphtha (petroleum), mydrotreated light (CAS	Type Ceiling TWA STEL TWA	1800 mg/m3 510 ppm 350 mg/m3 100 ppm 545 mg/m3 125 ppm 435 mg/m3 100 ppm 1600 mg/m3	Form
e-methylpentane (CAS 07-83-5) ethylbenzene (CAS 00-41-4) methylcyclohexane (CAS 08-87-2) maphtha (petroleum),	Type Ceiling TWA STEL TWA TWA	1800 mg/m3 510 ppm 350 mg/m3 100 ppm 545 mg/m3 125 ppm 435 mg/m3 100 ppm 1600 mg/m3 400 ppm 400 mg/m3	Form
emponents emethylpentane (CAS 07-83-5) ethylbenzene (CAS 00-41-4) methylcyclohexane (CAS 08-87-2) maphtha (petroleum), nydrotreated light (CAS 14742-49-0)	Type Ceiling TWA STEL TWA TWA TWA	1800 mg/m3 510 ppm 350 mg/m3 100 ppm 545 mg/m3 125 ppm 435 mg/m3 100 ppm 1600 mg/m3 400 ppm 400 mg/m3	Form
e-methylpentane (CAS 07-83-5) ethylbenzene (CAS 00-41-4) methylcyclohexane (CAS 08-87-2) maphtha (petroleum), mydrotreated light (CAS	Type Ceiling TWA STEL TWA TWA	1800 mg/m3 510 ppm 350 mg/m3 100 ppm 545 mg/m3 125 ppm 435 mg/m3 100 ppm 1600 mg/m3 400 ppm 400 mg/m3	Form
emponents emethylpentane (CAS 07-83-5) ethylbenzene (CAS 00-41-4) methylcyclohexane (CAS 08-87-2) maphtha (petroleum), nydrotreated light (CAS 14742-49-0)	Type Ceiling TWA STEL TWA TWA TWA Ceiling	1800 mg/m3 510 ppm 350 mg/m3 100 ppm 545 mg/m3 125 ppm 435 mg/m3 100 ppm 1600 mg/m3 400 ppm 400 mg/m3	Form
emponents emethylpentane (CAS 07-83-5) ethylbenzene (CAS 00-41-4) methylcyclohexane (CAS 08-87-2) maphtha (petroleum), nydrotreated light (CAS 14742-49-0)	Type Ceiling TWA STEL TWA TWA TWA	1800 mg/m3 510 ppm 350 mg/m3 100 ppm 545 mg/m3 125 ppm 435 mg/m3 100 ppm 1600 mg/m3 400 ppm 400 mg/m3 100 ppm 1800 mg/m3 440 ppm 1800 mg/m3 440 ppm 350 mg/m3	Form
e-methylpentane (CAS 07-83-5) ethylbenzene (CAS 00-41-4) methylcyclohexane (CAS 08-87-2) maphtha (petroleum), mydrotreated light (CAS 04742-49-0) methylcyclohexane (CAS 08-87-2)	Type Ceiling TWA STEL TWA TWA TWA TWA TWA Ceiling TWA	1800 mg/m3 510 ppm 350 mg/m3 100 ppm 545 mg/m3 125 ppm 435 mg/m3 100 ppm 1600 mg/m3 400 ppm 400 mg/m3 100 ppm 1800 mg/m3 440 ppm 350 mg/m3 85 ppm	Form
emponents emethylpentane (CAS 07-83-5) ethylbenzene (CAS 00-41-4) methylcyclohexane (CAS 08-87-2) maphtha (petroleum), nydrotreated light (CAS 14742-49-0)	Type Ceiling TWA STEL TWA TWA TWA Ceiling	1800 mg/m3 510 ppm 350 mg/m3 100 ppm 545 mg/m3 125 ppm 435 mg/m3 100 ppm 1600 mg/m3 400 ppm 400 mg/m3 100 ppm 1800 mg/m3 100 ppm 1800 mg/m3 100 ppm 1800 mg/m3	Form
e-methylpentane (CAS 07-83-5) ethylbenzene (CAS 00-41-4) methylcyclohexane (CAS 08-87-2) maphtha (petroleum), mydrotreated light (CAS 64742-49-0) mi-heptane (CAS 142-82-5) mi-hexane (CAS 110-54-3)	Type Ceiling TWA STEL TWA TWA TWA TWA Ceiling TWA TWA	1800 mg/m3 510 ppm 350 mg/m3 100 ppm 545 mg/m3 125 ppm 435 mg/m3 100 ppm 1600 mg/m3 400 ppm 400 mg/m3 100 ppm 1800 mg/m3 100 ppm 1800 mg/m3 100 ppm 1800 mg/m3 100 ppm	
e-methylpentane (CAS 07-83-5) ethylbenzene (CAS 00-41-4) methylcyclohexane (CAS 08-87-2) maphtha (petroleum), hydrotreated light (CAS 14742-49-0) methylcyclohexane (CAS 142-82-5) methylcyclohexane (CAS 142-82-5) methylcyclohexane (CAS 142-82-5) methylcyclohexane (CAS 142-82-5)	Type Ceiling TWA STEL TWA TWA TWA TWA TWA Ceiling TWA	1800 mg/m3 510 ppm 350 mg/m3 100 ppm 545 mg/m3 125 ppm 435 mg/m3 100 ppm 1600 mg/m3 400 ppm 400 mg/m3 100 ppm 1800 mg/m3 100 ppm 1800 mg/m3 100 ppm 1800 mg/m3	Form Mist.
components -methylpentane (CAS 07-83-5) thylbenzene (CAS 00-41-4) methylcyclohexane (CAS 08-87-2) aphtha (petroleum), ydrotreated light (CAS 4742-49-0) -heptane (CAS 142-82-5)	Type Ceiling TWA STEL TWA TWA TWA TWA Ceiling TWA TWA	1800 mg/m3 510 ppm 350 mg/m3 100 ppm 545 mg/m3 125 ppm 435 mg/m3 100 ppm 1600 mg/m3 400 ppm 400 mg/m3 100 ppm 1800 mg/m3 100 ppm 1800 mg/m3 100 ppm 1800 mg/m3 100 ppm	

US. NIOSH: Pocket Guide to Che Components	emicai Hazards Type	Value	Form
petrolatum (CAS 8009-03-8)	STEL	10 mg/m3	Mist.
,	TWA	5 mg/m3	Mist.
solvent naphtha (petroleum), light aliph. (CAS 64742-89-8)	TWA	400 mg/m3	
,		100 ppm	
toluene (CAS 108-88-3)	STEL	560 mg/m3	
,		150 ppm	
	TWA	375 mg/m3	
		100 ppm	

Biological limit values

ACGIH Biological Exposu Components	ure Indices Value	Determinant	Specimen	Sampling Time	
ethylbenzene (CAS 100-41-4)	0.15 g/g	Sum of mandelic acid and phenylglyoxylic acid	Creatinine in urine	*	
n-hexane (CAS 110-54-3)	0.4 mg/l	2,5-Hexanedio n, without hydrolysis	Urine	*	
toluene (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*	
	0.03 mg/l	Toluene	Urine	*	
	0.02 mg/l	Toluene	Blood	*	
xylene (CAS 1330-20-7)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*	

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

Exposure guidelines

US - California OELs: Skin designation

n-hexane (CAS 110-54-3)

Can be absorbed through the skin.

Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

toluene (CAS 108-88-3) Skin designation applies.

US ACGIH Threshold Limit Values: Skin designation

n-hexane (CAS 110-54-3)

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. 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. Polyvinyl chloride (PVC). Viton rubber (fluor rubber).

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

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.

9. Physical and chemical properties

Appearance

Physical state Liquid. **Form** Aerosol. Color Dark red. Odor Petroleum. Odor threshold Not available. Not available. pН

-244.7 °F (-153.7 °C) estimated Melting point/freezing point 118.4 °F (48 °C) estimated Initial boiling point and boiling

range

< 0 °F (< -17.8 °C) Closed Cup Flash point

Evaporation rate Fast.

Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits 1 % estimated

Flammability limit - lower

(%)

Flammability limit - upper

8 % estimated

(%)

Vapor pressure 1453.1 hPa estimated

Not available. Vapor density

0.73 Relative density

Not available. Solubility (water) Partition coefficient Not available.

(n-octanol/water)

489.2 °F (254 °C) estimated **Auto-ignition temperature**

Decomposition temperature Not available. Viscosity (kinematic) Not available. 86.4 % estimated Percent volatile

10. Stability and reactivity

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

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. Contact with incompatible materials.

Incompatible materials Strong acids. Strong oxidizing agents. Halogens.

Hazardous decomposition

products

Carbon oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause damage to organs through prolonged or repeated exposure by inhalation. Headache.

Nausea, vomiting. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and

nausea.

Skin contact Causes skin irritation.

Eye contact Causes serious eye irritation.

Ingestion May cause damage to organs through prolonged or repeated exposure by ingestion. Droplets of

the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical

pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics Aspiration may cause pulmonary edema and pneumonitis. 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. Skin

irritation. May cause redness and pain. Edema. Jaundice.

Components		
•	Species	Test Results
3-methylhexane (CAS 589-34-4) Acute Dermal		
LD50 Inhalation	Rabbit	> 2000 mg/kg
LC50 Oral	Rat	> 20 mg/l, 4 hours
LD50 hthylbenzene (CAS 100-41-4)	Rat	> 2000 mg/kg
Acute Dermal LD50	Rabbit	17800 mg/kg
Inhalation LC50	Rat	17.000 mg/kg 17.2 mg/l, 4 hours
Oral LD50	Rat	3500 mg/kg
neptane, branched, cyclic and line Acute Dermal LD50	ar (CAS 426260-76-6) Rabbit	> 2000 mg/kg
Inhalation LC50	Rat	> 60 mg/l, 4 hours
Oral LD50	Rat	> 5000 mg/kg
nethylcyclohexane (CAS 108-87-2 Acute Dermal		
LD50 Oral LD50	Rabbit Rat	> 2000 mg/kg > 4000 mg/kg
naphtha (petroleum), hydrotreated <u>Acute</u> Dermal	light (CAS 64742-49-0)	
LD50 Inhalation	Rabbit	> 2000 mg/kg
LC50 Oral	Rat	61 mg/l, 4 Hours
LD50 -heptane (CAS 142-82-5)	Rat	> 5000 mg/kg
<u>Acute</u> Dermal LD50	Rabbit	3000 mg/kg
Inhalation		

Material name: Battery Terminal Protector

Oral

LD50

SDS US

05046 Version #: 03 Revision date: 12-21-2016 Issue date: 10-21-2013

Rat

25000 mg/kg

Components **Species Test Results** n-hexane (CAS 110-54-3) **Acute Dermal** LD50 Rabbit > 1300 mg/kg Inhalation LC50 Rat < 48000 ppm, 4 Hours Oral LD50 Rat 15840 mg/kg paraffin oils (petroleum), catalytic dewaxed heavy (CAS 64742-70-7) **Acute Dermal** LD50 Rabbit > 2000 mg/kg Oral LD50 Rat > 5000 mg/kg petrolatum (CAS 8009-03-8) **Acute Dermal** LD50 Rabbit > 2000 mg/kg Inhalation LC50 Rat > 20 mg/l, 4 hours Oral LD50 > 2000 mg/kg Rat solvent naphtha (petroleum), light aliph. (CAS 64742-89-8) **Acute** Dermal LD50 Rabbit > 2000 mg/kg Inhalation LC50 Rat 3400 ppm, 4 hours Oral LD50 Rat > 5000 mg/kg toluene (CAS 108-88-3) **Acute Dermal** LD50 Rabbit > 5000 mg/kg Inhalation LC50 Rat 7585 ppm, 4 hours Oral LD50 Rat 5580 mg/kg xylene (CAS 1330-20-7) **Acute Dermal** LD50 Rabbit > 4300 mg/kg

Inhalation

LC50 Rat 5000 ppm, 4 hours

Oral

LD50 Rat 4300 mg/kg

Skin corrosion/irritationCauses skin irritation.Serious eye damage/eyeCauses serious eye irritation.

irritation

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

Respiratory sensitization Not a respiratory sensitizer.

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

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

mutagenic or genotoxic.

Carcinogenicity Suspected of causing cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

ethylbenzene (CAS 100-41-4) paraffin oils (petroleum), catalytic dewaxed light (CAS

64742-71-8)

3 Not classifiable as to carcinogenicity to humans.

2B Possibly carcinogenic to humans.

toluene (CAS 108-88-3) 3 Not classifiable as to carcinogenicity to humans. xylene (CAS 1330-20-7) 3 Not classifiable as to carcinogenicity to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

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

Not regulated.

Reproductive toxicity Components in this product have been shown to cause birth defects and reproductive disorders in

laboratory animals. Suspected of damaging fertility.

Specific target organ toxicity -

single exposure

May cause drowsiness and dizziness.

Specific target organ toxicity -

repeated exposure

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

repeated exposure by ingestion.

May be fatal if swallowed and enters airways. If aspirated into lungs during swallowing or vomiting, **Aspiration hazard**

may cause chemical pneumonia, pulmonary injury or death.

Chronic effects May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may

be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Eco

Very toxic	to aquatic life with long lasting effects.	
	Species	Test Results
07-83-5)		
EC50	Daphnia	1 - 10 mg/l, 48 hours
LC50	Fish	1 - 10 mg/l, 96 hours
41-4)		
EC50	Water flea (Daphnia magna)	2.1 mg/l, 48 hours
LC50	Fathead minnow (Pimephales promelas)	12.1 mg/l, 96 hours
c and linear (CAS	S 426260-76-6)	
EC50	Water flea (Daphnia magna)	1.5 mg/l, 48 hours
S 108-87-2)		
	EC50 LC50 41-4) EC50 LC50 c and linear (CAS	EC50 Daphnia LC50 Fish 41-4) EC50 Water flea (Daphnia magna) LC50 Fathead minnow (Pimephales promelas) c and linear (CAS 426260-76-6) EC50 Water flea (Daphnia magna)

Fish LC50

Striped bass (Morone saxatilis) 5.8 mg/l, 96 hours

naphtha (petroleum), hydrotreated light (CAS 64742-49-0)

Aquatic

Acute

Crustacea EC50 Daphnia 1 - 10 mg/l, 48 hours Fish LC50 Fish 1 - 10 mg/l, 96 hours

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Species Test Results Components n-heptane (CAS 142-82-5) **Aquatic** Acute EC50 Crustacea Water flea (Daphnia magna) 1.5 mg/l, 48 hours Fish LC50 Fathead minnow (Pimephales promelas) 2.1 - 2.98 mg/l, 96 hours n-hexane (CAS 110-54-3) Aquatic LC50 Fish Fathead minnow (Pimephales promelas) 2.101 - 2.981 mg/l, 96 hours solvent naphtha (petroleum), light aliph. (CAS 64742-89-8) Aquatic Fish LC50 Rainbow trout, donaldson trout 8.8 mg/l, 96 hours (Oncorhynchus mykiss) 8.8 mg/l, 96 hours Acute

Crustacea EC50 Water flea (Daphnia magna)

1.5 mg/l, 48 hours

toluene (CAS 108-88-3)

Aquatic

Acute

Crustacea EC50 Water flea (Daphnia magna) 6 mg/l, 48 hours Fish LC50 Coho salmon, silver salmon 5.5 mg/l, 96 hours (Oncorhynchus kisutch)

Aquatic

xylene (CAS 1330-20-7)

Fish LC50 Rainbow trout, donaldson trout 9.5 - 19.2 mg/l, 96 hours

(Oncorhynchus mykiss)

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

Bioaccumulative potential No data available. Partition coefficient n-octanol / water (log Kow)

2-methylpentane	3.74
ethylbenzene	3.15
methylcyclohexane	3.61
n-heptane	4.66
n-hexane	3.9
toluene	2.73
xylene	3.12 - 3.2

Bioconcentration factor (BCF)

naphtha (petroleum), hydrotreated light 10 - 25000 toluene 90 xylene 15

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 If discarded, this product is considered a RCRA ignitable waste, D001. 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.

D001: Waste Flammable material with a flash point <140 F Hazardous waste code

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.

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

14. Transport information

DOT

UN number UN1950

UN proper shipping name Aerosols, flammable, Limited Quantity

Transport hazard class(es)

Class 2.1 Subsidiary risk -Label(s) 2.1

Packing group Not applicable.

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

Special provisions N82
Packaging exceptions 306
Packaging non bulk 304
Packaging bulk None

IATA

UN number UN1950

UN proper shipping name Aerosols, flammable, Limited Quantity

Transport hazard class(es)

Class 2.1 Subsidiary risk -

Packing group Not applicable.

ERG Code 10L

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

Allowed with restrictions.

Other information

Passenger and cargo

aircraft

Cargo aircraft only Allowed with restrictions.

IMDG

UN number UN1950

UN proper shipping name AEROSOLS, Limited Quantity

Transport hazard class(es)

Class 2 Subsidiary risk -

Packing group Not applicable.

Environmental hazards

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

15. Regulatory information

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

Standard, 29 CFR 1910.1200.

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

ethylbenzene (CAS 100-41-4) n-hexane (CAS 110-54-3) toluene (CAS 108-88-3) xylene (CAS 1330-20-7)

CERCLA Hazardous Substance List (40 CFR 302.4)

ethylbenzene (CAS 100-41-4) Listed. n-hexane (CAS 110-54-3) Listed. xylene (CAS 1330-20-7) Listed.

CERCLA Hazardous Substances: Reportable quantity

ethylbenzene (CAS 100-41-4) 1000 LBS

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n-hexane (CAS 110-54-3) 5000 LBS xylene (CAS 1330-20-7) 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

ethylbenzene (CAS 100-41-4) n-hexane (CAS 110-54-3) xylene (CAS 1330-20-7)

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

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

toluene (CAS 108-88-3) 6594

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

toluene (CAS 108-88-3) 35 %WV

DEA Exempt Chemical Mixtures Code Number

toluene (CAS 108-88-3) 594

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 - Yes
Pressure Hazard - Yes
Reactivity Hazard - No

No

SARA 302 Extremely hazardous substance

US state regulations

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

ethylbenzene (CAS 100-41-4)

liquefied petroleum gas (CAS 68476-86-8)

naphtha (petroleum), hydrotreated light (CAS 64742-49-0)

n-hexane (CAS 110-54-3)

paraffin oils (petroleum), catalytic dewaxed heavy (CAS 64742-70-7)

petrolatum (CAS 8009-03-8)

solvent naphtha (petroleum), light aliph. (CAS 64742-89-8)

toluene (CAS 108-88-3) xylene (CAS 1330-20-7)

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

2-methylpentane (CAS 107-83-5) 3-methylhexane (CAS 589-34-4)

ethylbenzene (CAS 100-41-4)

methylcyclohexane (CAS 108-87-2)

naphtha (petroleum), hydrotreated light (CAS 64742-49-0)

n-heptane (CAS 142-82-5)

n-hexane (CAS 110-54-3)

solvent naphtha (petroleum), light aliph. (CAS 64742-89-8)

toluene (CAS 108-88-3) xylene (CAS 1330-20-7)

US. Massachusetts RTK - Substance List

2-methylhexane (CAS 591-76-4)

2-methylpentane (CAS 107-83-5)

3-methylhexane (CAS 589-34-4)

ethylbenzene (CAS 100-41-4)

methylcyclohexane (CAS 108-87-2)

naphtha (petroleum), hydrotreated light (CAS 64742-49-0)

n-heptane (CAS 142-82-5)

n-hexane (CAS 110-54-3)

Material name: Battery Terminal Protector

SDS US

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paraffin oils (petroleum), catalytic dewaxed heavy (CAS 64742-70-7) solvent naphtha (petroleum), light aliph. (CAS 64742-89-8) xylene (CAS 1330-20-7)
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US. Pennsylvania Worker and Community Right-to-Know Law

2-methylhexane (CAS 591-76-4) 2-methylpentane (CAS 107-83-5) 3,3-dimethylpentane (CAS 562-49-2) 3-methylhexane (CAS 589-34-4) cumene (CAS 98-82-8)

cumene (CAS 98-82-8) ethylbenzene (CAS 100-41-4) methylcyclohexane (CAS 108-87-2)

naphtha (petroleum), hydrotreated light (CAS 64742-49-0)

n-heptane (CAS 142-82-5) n-hexane (CAS 110-54-3)

paraffin oils (petroleum), catalytic dewaxed heavy (CAS 64742-70-7) paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8)

solvent naphtha (petroleum), light aliph. (CAS 64742-89-8)

toluene (CAS 108-88-3) xylene (CAS 1330-20-7)

US. Rhode Island RTK

cumene (CAS 98-82-8) ethylbenzene (CAS 100-41-4) methylcyclohexane (CAS 108-87-2)

naphtha (petroleum), hydrotreated light (CAS 64742-49-0)

n-heptane (CAS 142-82-5) n-hexane (CAS 110-54-3)

paraffin oils (petroleum), catalytic dewaxed heavy (CAS 64742-70-7) paraffin oils (petroleum), catalytic dewaxed light (CAS 64742-71-8)

petrolatum (CAS 8009-03-8)

solvent naphtha (petroleum), light aliph. (CAS 64742-89-8)

toluene (CAS 108-88-3) xylene (CAS 1330-20-7)

US. California Proposition 65

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

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

benzene (CAS 71-43-2)

cumene (CAS 98-82-8)

ethylbenzene (CAS 100-41-4)

naphthalene (CAS 91-20-3)

Listed: February 27, 1987

Listed: April 6, 2010

Listed: June 11, 2004

Listed: April 19, 2002

US - California Proposition 65 - CRT: Listed date/Developmental toxin

benzene (CAS 71-43-2) Listed: December 26, 1997 toluene (CAS 108-88-3) Listed: January 1, 1991

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

benzene (CAS 71-43-2) Listed: December 26, 1997

Volatile organic compounds (VOC) regulations

EPA

Aerosol coatings (40 Not regulated

CFR 59, Subpt. E)

State

Aerosol coatings This product is regulated as an Electrical Coating. This product is compliant for sale in all 50

states.

Maximum incremental 1.25 reactivity (MIR)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	No

Country(s) or region Inventory name On inventory (yes/no)*

European Inventory of Existing Commercial Chemical

Substances (EINECS)

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

Philippines Philippine Inventory of Chemicals and Chemical Substances No

(PICCS)

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

New Zealand Inventory

Yes

No

*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

Issue date10-21-2013Revision date12-21-2016Prepared byAllison Cho

Version # 03

New Zealand

Further information CRC# 597P-Q
HMIS® ratings Health: 2*
Flammability: 4
Physical hazard: 1
Personal protection: B

NFPA ratings Health: 2

Flammability: 4 Instability: 1

NFPA ratings

2 1

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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.

Material name: Battery Terminal Protector

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