ELECTRICAL CONTACT CLEANER

Version: 1.2
Released: 2015-07-10 Revision Date: 2022-12-09

1. IDENTIFICATION OF THE SUBSTANCE / APPLICATION AND THE COMPANY

Supplier:
Maxima Racing Oils
9266 Abraham Way
Santee, CA 92071
USA
+1 619 449 5000

Product Name: Electrical Contact Cleaner
Article Number: 72920

Applications: Electrical Contact Cleaner

Emergency Telephone: In USA: CHEMTREC +1 703 527 3887 (24 hours)
Outside USA: +1 619 449 5000

2. HAZARDS IDENTIFICATION

GHS Classification

Aerosols	Category 1
Gases Under Pressure	Compressed Gas
Acute Toxicity	Category 4 (Oral)
Aspiration Toxicity	Category 1
Skin Irritation	Category 2
Skin Sensitization	Category 1
Eye Irritation	Category 2A
Specific Target Organ Toxicity – Single Exposure	Category 1
Specific Target Organ Toxicity – Single Exposure	Category 3

GHS Pictogram

Signal Word **Danger!**

Hazard Statements

H222 Extremely flammable aerosol.
H280 Contains gas under pressure; may explode if heated.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H370 Causes damage to optic nerve and central nervous system.

ELECTRICAL CONTACT CLEANER

Version: 1.2
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Precautionary Statements

Prevention P210 Keep away from heat, sparks, open flames or hot surfaces. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Pressurized container: Do not pierce or burn, even after use.
P260 Do not breathe mist, vapors or spray
P264 Wash thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves and eye protection.
P270 Do not eat, drink or smoke when using this product.

Response P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P330 Rinse mouth.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P333 + P313 If skin irritation or rash occurs: Get medical attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 Call a POISON CENTER or doctor if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical attention.
P308 + P311 IF exposed or concerned: Call a POISON CENTER or doctor.

Storage P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122 F.

Disposal P501 Dispose of contents and container in accordance with local and national regulations.

Other Hazards None

3. COMPOSITION / INFORMATION ON INGREDIENTS

Components	Content %	CAS Number
Acetone	30-60	67-64-1
Propane/Butane/Isobutane Propellant	15-30	74-986
		106-97-8
		75-28-5
Heptane	10-30	142-82-5
d-Limonene	1-10	5989-27-5
Methanol	1-<4	67-56-1
2-Butoxyethanol	1-5	111-76-2

ELECTRICAL CONTACT CLEANER

Version: 1.2
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The specific identity and/or exact percentage has been withheld as a trade secret.

4. FIRST-AID MEASURES

Inhalation	Immediately remove to fresh air. If breathing is difficult have qualified personnel administer oxygen. If breathing has stopped, administer artificial respiration. Get medical attention.
Skin Contact	Remove contaminated clothing. Wash skin thoroughly with soap and water. If irritation develops, get medical attention. Launder clothing before re-use.
Eye Contact	Flush eyes with large quantities of water for several minutes, holding the eyelids apart. Get medical attention if irritation develops or persists.
Ingestion	Unlikely route of exposure with an aerosol container. If conscious, rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious or convulsing person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration into the lungs. Get immediate medical attention.
Most Important Symptoms	Causes eye and skin irritation. Inhalation of vapors or mist may cause respiratory irritation and central nervous system effects such as headache, dizziness, drowsiness, nausea and unconsciousness. Aspiration hazard: Harmful or fatal if swallowed. Prolonged overexposure may cause optic nerve and nervous system damage.
Indication of Immediate Medical Attention Needed	Get immediate medical attention if swallowed.
Notes to Physician	Treat appropriately

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Use carbon dioxide, foam or dry chemical. Water may be ineffective but can be used to cool exposed containers and structures and disperse flammable vapors.
Specific Hazards Arising From The Chemical	Contents under pressure. Keep away from heat and open flames. Container may rupture or explode in the heat of a fire. Prolonged exposure to temperatures above 120°F may cause cans to burst. Combustion may produce carbon and nitrogen oxides.
Special Protective Equipment And Precautions For Fire-Fighters	Firefighters should wear full emergency equipment and a NIOSH approved positive pressure self-contained breathing apparatus. Cool exposed intact containers with water. Protect against bursting cans.

ELECTRICAL CONTACT CLEANER

Version: 1.2
Released: 2015-07-10 Revision Date: 2022-12-09

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Evacuate spill area and keep unprotected personnel away. Remove all sources of ignition. Ventilate area. Wear appropriate protective clothing. See also: "Personal Protection "section 8.
Environmental Hazards	Avoid release into the environment. Report spill as required by local and federal regulations.
Methods/Materials for Cleaning up	Collect liquid with an absorbent material and place in a container suitable for flammable waste. Ensure collected material is handled in accordance with section 13 "Disposal Considerations".

7. HANDLING AND STORAGE

Precautions for Safe Handling:	Avoid contact with the eyes, skin and clothing. Do not breathe vapors or mists. Wear protective clothing and equipment. Use only with adequate ventilation. Wash thoroughly with soap and water after handling. Keep away from heat sources. Contents under pressure. Do not smoke during use. Do not expose to temperatures above 120°F. Do not puncture or incinerate containers.
Conditions for Safe Storage	Store in a cool, well-ventilated area at temperatures below 120°F. Do not store in direct sunlight. Protect from physical damage.
Aerosol Fire Protection Level	Level 2 Aerosol (NFPA 30B)

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits	Acetone	1000 ppm TWA OSHA PEL 250 ppm TWA, 500 ppn ACGIH TLV
	Propane/Butane/Isobutane Propellant	1000 ppm TWA OSHA PEL (as propane) 1000 STEL ACGIH TLV (as butane)
	Heptane	500 ppm TWA OSHA PEL 400 ppm TWA, 500 ppm STEL ACGIH TLV
	d-Limonene	None Established
	Methanol	200 ppm TWA OSHA PEL 200 ppm TWA, 250 ppm STEL
	2-Butoxyethanol	50 ppm TWA, skin OSHA PEL 20 ppm TWA ACGIH TL

Appropriate Engineering Controls

Personal Protection

ELECTRICAL CONTACT CLEANER

Version: 1.2
Released: 2015-07-10 Revision Date: 2022-12-09

Respiratory Protection:	If the exposure limits are exceeded, a NIOSH approved organic vapor respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.
Eye Protection:	Wear chemical safety glasses or goggles to prevent eye contact.
Skin/Body Protection:	Protective clothing if needed to avoid skin contact and contamination of personal clothing. Suitable washing should be available in the work area. Contaminated clothing should be removed and laundered before re-use.
Hand Protection:	Wear impervious gloves to avoid skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid
Color	Clear, colorless
Odor	Solvent odor
Odor Threshold	0.001 ppm (2-butoxyethanol)
pH	No data available
Freezing Point	-130.9°F (-90.5°C) (heptane)
Boiling Point	132.9°F (56.05°C) (acetone)
Flash Point	122°F (50°C) (concentrate)
Evaporation Rate	No data available
Flammability (solid, gas)	Not applicable
Upper Explosion Limit	1.05% (heptane)
Lower Explosion Limit	36.0% (methanol)
Vapor Pressure	45 psi @ 70°F
Vapor Density (Air=1)	>1
Relative Density	0.76
Solubility	Negligible in water
Partition Coefficient: n-octanol/water	No data available
Auto Ignition Temperature	460°F (36°C) (2-butoxyethanol)
Decomposition Temperature	No data available
Volatile Organic Compounds (VOC)	No data available
Viscosity	No data available

10. STABILITY AND REACTIVITY

Reactivity	Not expected to be reactive.

ELECTRICAL CONTACT CLEANER

Version: 1.2
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Chemical Stability	Stable.
Possibility of Hazardous Reactions	None known.
Conditions to Avoid	Keep away from heat, sparks, flames and all other sources of ignition. Dropping containers may cause bursting.
Incompatible Materials	Avoid contact with strong oxidizing agents and acids.
Hazardous Decomposition Product	Thermal decomposition may produce carbon and nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

Potential Health Hazards

Eye Contact: Causes irritation with redness , tearing and pain.

Skin Contact: Causes irritation with redness and drying of the skin. Prolonged contact may cause defatting of the skin and dermatitis.

Inhalation: Inhalation of vapors may cause mucous membrane and respiratory irritation and central nervous system depression with symptoms of headache, dizziness, giddiness, intoxication, nausea, vomiting, disorientation, stupor and unconscious.

Ingestion: Ingestion may cause mucous membrane and gastrointestinal irritation and nervous system depression with symptoms of headache, dizziness, nausea, narcosis and unconsciousness. Aspiration into the lungs during ingestion or vomiting may cause serious lung damage which may be fatal. Methanol is very slowly eliminated from the body. Ingestion of methanol may cause nervous system effects, blurred vision, blindness, coma and death.

Chronic Effects of Overexposure: Prolonged intentional abuse may damage many organ systems including the central nervous systems, vision, liver, kidneys, lymphoid system, heart and blood. Such abuse has been associated with brain damage characterized by disturbances in gait, personality changes and loss of memory.

Sensitization: d-Limonene was positive in a mouse local lymphnode assay.

Mutagenicity: This product is not expected to cause mutagenic activity.

Reproductive Toxicity: None of the component have been found to cause reproductive or developmental effects.

Carcinogenicity: None of the components of this product are listed as a carcinogen or suspected carcinogen by IARC, NTP, or OSHA.

Acute Toxicity:

Acetone	Oral rat LD50 5800 mg/kg, Inhalation rat LC50 76 mg/L/4 hr, Dermal rabbit LD50 >7426 mg/L
Propane/Butane/Isobutane Propellant	Inhalation mouse LC50 520,400 ppm/2 hr
Heptane	Oral rat LD50 >5000 mg/kg, Inhalation rat LC50 >29.29 mg/L/4 hr. Dermal rabbit LD50 >2000 mg/kg.
d-Limonene:	Oral rat LD50 >2000 mg/kg,

ELECTRICAL CONTACT CLEANER

Methanol	Oral rat LD50 5628 mg/kg, Dermal rabbit LD50 15800 mg/L, Inhalation rat LC50 87.5 mg/L/6 hr
2-Butoxyethanol	Oral guinea pig LD50 1414 mg/L, Inhalation rat LC50 3.9 mg/L/4 hr, Dermal rabbit LD50 >2000 mg/kg.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Acetone	96 hr LC50 Pimephales promelas 8120 mg/L, 48 hr LC50 Daphnia pulex 8800 mg/L
Propane/Butane/Isobutane Propellant	96 hr LC50 fish 27.98 mg/L, 48 hr EC50 daphnid 14.22 mg/L, 96 hr EC50 Green algea 7.71
Heptane	96 hr LL50 Oncorhynchus mykiss 5.738, 48 hr EC50 daphnia magna 1.5 mg/L, 72 hr EL50 Pseudokirchnerella subcapitata4.338 mg/L
d-Limonene:	96 hr LC50 Pimephales promelas 0.72 mg/L, 48 hr EC50 daphnia magna 0.36 mg/L, 72 hr EC50 Desmodesmus subspicatus 150 mg/L
Methanol	96 hr LC50 Lepomis macrochirus 15400 mg/L, 96 hr EC50 Daphnia magna 18260 mg/L, 96 hr EC50 Pseudokirchnerella subcapitata 22000 mg/L
2-Butoxyethanol	96 hr LC50 Oncorhynchus mykiss 1474 mg/L, 48 hr EC50 daphnia magna 1550 mg/L, 72 hr EC50 Pseudokirchnerella subcapitata 911 mg/L

Biodegradation	Acetone, heptane, d-limonene, methanol and 2-butoxyethanol are readily biodegradable.
Bioaccumulation	Acetone and 2-butoxyethanol have a BCF of 3. Methanol has a BCF of <10. This suggests the potential for bioaccumulation is low. Heptane has a BCF of 550. D-Limonene has a BCF of 66. This suggests the potential for these chemicals to bioaccumulate is high.
Mobility in soil	Acetone, methanol and 2-butoxyethanol are highly mobile in soil. Heptane is moderately mobile in soil. D-Limonene is expected to have a low mobility in soil.
Other adverse effects:	None known.

13. DISPOSAL CONSIDERATIONS

Disposal	Dispose in accordance with all local, state and federal regulations. Do not puncture or incinerate containers.

ELECTRICAL CONTACT CLEANER

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14. TRANSPORT INFORMATION

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
DOT	UN1950	Aerosols	2.1		
TDG	UN1950	Aerosols	2.1		
IMDG	UN1950	Aerosols	2.1		
IATA	UN1950	Aerosols	2.1		

Note: This product can be shipped as a limited quantity if the packaging complies.

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form
Special precautions: None known.

15. REGULATORY INFORMATION

CERCLA: This product has a Reportable Quantity (RQ) of 8333 lbs. (based on the RQ for Acetone of 5000 lbs). Releases above the RQ must be reported to the National Response Center. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.
EPA SARA 302: This product does not contain chemicals regulated under SARA Section 302.
EPA SARA 311 Hazard Classification: Acute Health, Fire Hazard, Sudden Release of Pressure.
EPA SARA 313: This product contains the following chemicals that are regulated under SARA Title III, section 313:

Methanol	67-56-1	1-5%
Glycol Ethers (2-butoxyethanol)	111-76-2	1-5

California Proposition 65: This product contains the following chemicals known to the State of Californi to cause cancer and reproductive toxicity:

Methanol	67-56-1	1-5%	developmental

Chemical Inventories
Toxic Substances Control Act: All of the components of this product are listed on the TSCA inventory

16. OTHER INFORMATION

NFPA Rating (NFPA 704):	Health: 2	Fire: 3	Instability: 0
HMIS Rating:	Health: 2*	Fire: 4	Physical Hazard: 0

*Chronic Health Hazard

ELECTRICAL CONTACT CLEANER

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Date of Revision: November 2, 2017
Date of Previous Revision: August 2015
Revision History:
7/10/15: Converted to GHS format. All sections revised.
8/13/15: Change percent methanol (Section 3)
11/2/17: Updated emergency telephone #
12/09/22: Date of Revision

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.