

SUPER CONTACT CLEANER

801C-LIQUID

Safety Data Sheet

Section 1: Product and Company Identification

Product Identifier and Other Means of Identification

Product Name: Super Contact Cleaner**MSDS Code:** 801C-Liquid**Related Part #:** 801C-100ML

Recommended Use and Restriction on Use

Use: Cleans and protects contact pads**Uses Advised Against:** Do not use on live circuit

Details of Manufacturer or Importer

Manufacturer

MG Chemicals
1210 Corporate Drive
Burlington, Ontario L7L 5R6
CANADA

MG Chemicals (Head Office)
9347-193 Street
Surrey, British Columbia V4N 4E7
CANADA

☎ 1-800-340-0772

FAX 1-800-340-0773

E-MAIL: support@mgchemicals.comWEB www.mgchemicals.com

☎ 1-905-331-1396

FAX 1-905-331-2682

E-MAIL: info@mgchemicals.comE-MAIL (Competent Person): sds@mgchemicals.com

Emergency Phone Number

For hazardous material incidents ONLY—leaks, spills, fires, exposures or accidentsUSA or CANADA: Call CHEMTREC ☎: **1-800-424-9300****For emergencies involving dangerous goods;** Collect 24/7CANADA: Call CANUTEC ☎: **1-613-996-6666** or ***666** on cellular phones

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Section 2: Hazards Identification




Classification of Hazardous Chemical

WHMIS Classification



B3 – Combustible Liquid;
D2B – Toxic Material (Skin Irritation)

GHS Categories

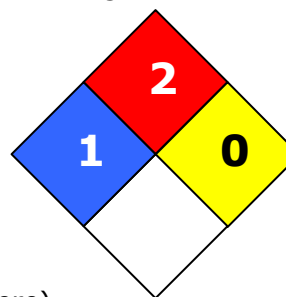
| Criteria | Category | Signal Word | Pictograms |
|---|----------|-------------|---|
| Flammable Liquids | 3 | Warning |  |
| Aspiration Hazard | 1 | Danger |  |
| Skin Irritation | 2 | Warning |  |
| Specific Target Organ Toxicity Single Exposure | 3 | Warning | |

Other Classifications

HMIS® RATING

| | |
|-----------------------------|----------|
| HEALTH: | 1 |
| FLAMMABILITY: | 2 |
| PHYSICAL HAZARD: | 0 |
| PERSONAL PROTECTION: | |

NFPA® 704 CODES



Approximate HMIS and NFPA Risk Ratings Legend:




0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

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Label Elements

| | |
|---|---|
| Signal Word | DANGER |
| Pictograms | Hazard Statements |
|  | H226: Flammable liquid and vapor |
|  | H315: Causes skin irritation H336: May cause drowsiness and dizziness |
|  | H304: May be fatal if swallowed and enters airways |
| | Precautionary Statements |
| Prevention | <p>P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.</p> <p>P233: Keep container tightly closed.</p> <p>P240: Ground/bond container and receiving equipment.</p> <p>P242 + P241 + P243: Use only non-sparking tools. Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against static discharge.</p> <p>P280: Wear protective gloves/eye protection.</p> <p>P264: Wash hands thoroughly after handling.</p> <p>P261: Avoid breathing gas/vapors/mist/spray.</p> <p>P271: Use outdoors or in a well-ventilated area.</p> |
| Response | <p>P370 + P378: In case of fire: Use dry chemical, carbon dioxide, or chemical foam to extinguish.</p> <p>P303 + P361+ P364 +P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water/shower.</p> <p>P304+ P340 + P312: IF INHALED: Remove person to fresh air (out of the contaminated zone) and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.</p> |

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| | |
|-----------------|---|
| Storage | P403 + P235: Store in well ventilated place. Keep cool. P405: Store locked up. |
| Disposal | P501: Dispose of contents/container in accordance to local/regional/national/international regulations. |

Other Hazards

Repeated exposure may cause skin dryness or cracking.

Section 3: Hazardous Ingredients

| CAS # | Chemical Name | Wt% |
|--------------|---|------------|
| 64741-65-7 | petroleum naphtha, heavy alkylate (mineral spirits) | 60-70% |
| 64742-47-8 | petroleum hydrotreated light | 25-30% |
| 8042-47-5 | mineral oil used in metal working ^{a)} | 3-5% |
| 2455-71-2 | five ring polyphenyl ether | 1-2% |

a) The base mixture includes mineral oils used in metal working. The following CAS numbers are related 8042-47-5, 64742-46-7, 64742-47-8, 64742-53-6, 64742-54-7, 64742-55-8, 72623-84-8, 72623-85-9, 72623-86-0, 72623-87-1, 178603-64-0, 178603-65-1, 178603-66-2, 445411-73-4

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Section 4: First-Aid Measures

| <i>Exposure Condition</i> | <i>GHS Code: Precautionary Statement</i> |
|-----------------------------------|--|
| IF IN EYES | P305 |
| Symptoms | Immediate: <i>irritation, redness</i> |
| Response | P351: Rinse cautiously with water for several minutes. P338: Remove contact lenses, if present and easy to do. Continue rinsing. |
| If eye irritation persists | P313: Get medical advice/attention. |
| IF ON SKIN (or hair) | P303 |
| Symptoms | Immediate: <i>irritation, dry skin, redness</i> |
| Response | P361+ P364: Take off immediately all contaminated clothing and wash it before reuse. P353: Rinse skin with water/shower. |
| If skin irritation occurs | P313: Get medical advice/attention. |
| IF INHALED | P304 |
| Symptoms | Immediate: <i>respiratory system irritation, dizziness, drowsiness, headaches, weakness, unconsciousness</i> |
| Response | P340: Remove person to fresh air (out of the contaminated zone) and keep comfortable for breathing. |
| If feeling unwell | P312: Call a POISON CENTRE/doctor. |
| IF SWALLOWED | P301 (<i>Not a likely route of exposure under normal use</i>) |
| Symptoms | Immediate: <i>respiratory system irritation, nausea, headaches, weakness, unconsciousness</i> |
| Response | P310: Immediately call a POISON CENTER/doctor P331: Do NOT induce vomiting. |

SUPER CONTACT CLEANER**801C-LIQUID****Section 5: Fire-Fighting Measures**

| | | | | | |
|----------------------------------|--------------------|----------------------------------|-------------------|--------------------------------|-----|
| Auto-ignition Temperature | 216 °C [421 °F] | Flash Point ^{a)} | 54 °C [130 °F] | LFL [LEL] ^{b)} | 1% |
| | | | | UFL [UEL] | 10% |

In case of fire P370**Response** P378: Use dry chemical, carbon dioxide, or chemical foam to extinguish. Use water spray to cool containers.**Combustion Products** Produces carbon oxides (CO, CO₂) and smoke**Fire-Fighter** Wear self-contained breathing apparatus for fire fighting**General Information** Vapors may accumulate in low-lying areas.

a) Pensky-Martens Closed Cup value

b) Limits based on mineral oil component (CAS# 8042-47-5):
LFL = Lower Flammability [or Explosion] Limit (in volume %);
UFL = Upper Flammability [or Explosion] Limit (in volume %)**Section 6: Accidental Release Measures****Personal Protection:** See Section 8. Avoid breathing the mist/vapors.**Containment** Remove all sources of ignition. Prevent spill from entering drains and waterways.**Cleaning** Collect liquid in a sealable, solvent-resistant container. Sprinkle inert absorbent compound onto spill, then sweep into the container. Wipe up further residue with paper towels or rags and place dirty materials in container. Wash remaining residues with soap and water.**RECOMMENDATION:** Use containers resistant to petroleum fuel or oil products.**Disposal** Dispose of spill waste according to Section 13.

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Section 7: Handling and Storage

- Prevention** P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P211: Do not spray on an open flame or other ignition source.
P262: Do not get in eye, on skin, or on clothing.
P270: Do not eat, drink, or smoke when using this product.
P261 + P271 + P284: Avoid breathing fume/mist/vapors. Use only outdoors or in well ventilated area. In cases of inadequate ventilation wear respiratory protection.
- Handling** P280: Wear protective gloves/clothing/eye protection.
P264: Wash hands thoroughly after handling.
- Storage** P235: Keep cool.
- RECOMMENDATION:** Keep in well ventilated room. Do not expose sealed container to temperatures exceeding 40 °C [104 °F].

Section 8: Exposure Controls/Personal Protection

Substances with Occupational Exposure Limit Values

| Chemical Name | Country | Long Term Exposure Limits (PEL) | Short Term Exposure Limits (STEL) |
|--|--|--|--|
| Petroleum Naphta, Heavy Alkylate (Mineral Spirits) | Supplier Canada ON | 1200 mg/m ³ 525 mg/m ³ | Not established Not established |
| Petroleum Hydrotreated Light (aerosol) | ACGIH Canada BC Canada ON | 200 mg/m ³ 200 mg/m ³ 525 mg/m ³ a) | Not established Not established Not established |
| Mineral oil / metal working oil (mist) | ACGIH Canada QC Canada ON Canada BC | 5 mg/m ³ 5 mg/m ³ 5 mg/m ³ 1 mg/m ³ | Not established 10 mg/m ³ 10 mg/m ³ Not established |
| Polyphenyl Ether | ACGIH | Not established | Not established |

Note: Ingredients are listed in descending weight contribution order (from greatest to least). The ACGIH², OSHA, and Canadian provinces exposure limits were consulted. Limits from by RTECS database¹ of the Canadian Centre for Occupational Health and Safety (CCOHS) a data from suppliers' SDS were also consulted. Short term exposure limits (STEL) are usually for 15 min and long term permissible exposure limits (PEL) for 8 h.

a) Supplier calculated exposure limit

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SUPER CONTACT CLEANER**801C-LIQUID****Engineering Controls****Ventilation**

Keep airborne concentrations below exposure limits.

Personal Protective Equipment**Eye protection**

Wear appropriate protective eyeglasses or chemical safety goggles.

RECOMMENDATION: Use safety glasses with lateral protection (side shields).

Skin Protection

Wear appropriate protective clothing to prevent skin contact.

RECOMMENDATION: Use of protective gloves in butyl rubber, nitrile rubber, or other chemically resistant gloves.

Respiratory Protection

If exposed to mist, wear respirator such as a half-mask respirator.

RECOMMENDATION: Consult your local safety supply store to ensure your respirator has filter cartridges appropriate for the ingredients listed in section 3 of this MSDS, and that the respirator is fitted to the employee by a professional. Ensure vapor cartridges are stored in sealed plastic bags when not being used.

General Hygiene Considerations

Wash hands thoroughly with water and soap after handling.

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Section 9: Physical and Chemical Properties

| | | | |
|---|--------------------|---|---------------------|
| Physical State | Liquid | Appearance | Clear, light yellow |
| Odor | Slight hydrocarbon | Odor Threshold | Not available |
| pH | Not available | Specific Gravity | 0.77 |
| Solubility in Water | Slightly soluble | Freezing/Melting Point | Not available |
| Flash Point ^{a)} | 54 °C [129 °F] | Vapor Pressure @ 20 °C | 0.5 mmHg [0.07 kPa] |
| Boiling Point | 175 °C [347 °F] | Evaporation Rate | moderate |
| Lower Flammability Limit ^{b)} | 1% | Upper Flammability Limit ^{b)} | 10% |
| Auto-ignition Temperature | 216 °C [421 °F] | Decomposition Temperature | Not available |
| Viscosity @40 °C | Not established | Vapor Density | ~5 (Air =1) |
| Partition Coefficient | Not established | | |

a) Pensky-Martens Closed Cup value

b) Limits based on mineral oil component (CAS# 8042-47-5)

Section 10: Stability and Reactivity

| | |
|----------------------------|--|
| Stabilities | Chemically stable at normal temperatures and pressures |
| Conditions to Avoid | Misting, ignition sources, temperatures above 40 °C [104 °F]), and incompatible substances. |
| Incompatibilities | Strong oxidizing agents; may react with nitrites or nitrosating agents to form of nitrosamines. Nitrosamines cause cancer in animal studies. |
| Polymerization | Will not occur |
| Decomposition | Will not decompose under normal conditions. For thermal decomposition, see combustion products in Section 5 |

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Section 11: Toxicological Information

Routes of Exposure

Eyes, ingestion, inhalation, and skin

Symptoms Summary

Eyes None known

Skin Cause mild to moderate skin irritation.

Inhalation Overexposure may lead to visual impairment and central nervous system effects such as dizziness, drowsiness, or weakness

Ingestion Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. See inhalation symptoms.

Chronic Not applicable.

Acute Toxicity (Lethal Exposure Concentrations)

| Chemical Name | LD50 oral | LD50 dermal | LC50 inhalation | TCLo inhalation ^{a)} |
|--|---------------------------------|------------------------------------|---------------------------------|-------------------------------|
| Petroleum Naphta, Heavy Alkylate | >7 600 mg/kg Rat ^{a)} | >3 040 mg/kg Rabbit ^{a)} | >5.9 mg/L 4h Rat ^{a)} | Not available |
| Petroleum Hydrotreated Light | >8 000 mg/kg Rat | >4 000 mg/kg Rabbit | >2 500 ppm 4h Rat ^{a)} | Not available |
| Mineral oil / metal working oil (mist) | >5 000 mg/kg Rat | Not available | Not available | Not available |
| Propylene ether | >34 600 mg/kg Rat ^{a)} | >34 600 mg/kg Rabbit ^{a)} | >47 mg/L 4 h Rat ^{b)} | Not available |

Note: Representative toxicity data from by RTECS database of the Canadian Centre for Occupational Health and Safety (CCOHS)¹ data from supplier MSDS were also consulted.

a) Data from supplier MSDS

b) Supplier lethal concentration 50 (LC50) value; no observed death at this highest possible concentration achievable by heating to 329 °C.

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| | |
|--|---|
| Skin corrosion/irritation | Skin irritant |
| Serious eye damage/irritation | No data available |
| Sensitization (allergic reactions) | None known or expected |
| Carcinogenicity (risk of cancer) | Not classified or listed as a carcinogen by IARC, ACGIH, CA Prop 65, or NTP |
| Mutagenicity (risk of heritable genetic effects) | No data available |
| Reproductive Toxicity (risk to sex functions) | No data available |
| Teratogenicity (risk of fetus malformation) | No data available |
| STOT-single exposure | Inhalation may affect the central nervous system causing narcotic effects |
| STOT-repeated exposure | No data available |
| Aspiration hazard | Mixture is a class 1 aspiration hazard. It contains over 10% class 1 aspiration hazard components and has a mixture viscosity of <math><20.5 \text{ mm}^2/\text{s}</math> at 40 °C. |

SUPER CONTACT CLEANER**801C-LIQUID****Section 12: Ecological Information**

The ecotoxicity of the mixture was estimated by the calculation method using the summation of classified ingredients. The IMDG Code criteria and the raw-material MSDS along with supporting data for the classification of registered substances from the European Chemical Agency database (<http://echa.europa.eu>) were used.

Supplier safety data sheet all report low aquatic toxicity or no data available. The product will float on water. Prevent product from entering drains or waterways.

Acute Ecotoxicity

Data insufficient for classification

Chronic Ecotoxicity

Data insufficient for classification

Biodegradability

Major components are biodegradable.

Bioaccumulative Potential

Not available

Mobility in Soil

Not available

Other Effects

Regulated Volatile Organic Content (WHMIS/EU-VOC/LVP exemption)* = 68% (524 g/L)

Regulated Volatile Organic Content (EPA-VOC) = 100% (770 g/L)

**The Canadian WHMIS and European VOC use boiling point exemptions, and the California consumer product uses the Low Vapor Pressure (LVP) exemption*

Section 13: Disposal Information

P501: Dispose of contents in accordance with all local, regional, national, and international regulations.

SUPER CONTACT CLEANER**801C-LIQUID****Section 14: Transport Information****Ground**

Refer to TDG regulations (Canadian Transportation of Dangerous Goods regulations); **USA CFR 49 Regulations** (Parts 100 to 185). **ADR** (European Agreement Concerning the International Carriage of Dangerous Goods by Road, and **ADN** (Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways).

Limited Quantity**IMDG marking:** LTD QTY**Air**

Refer to ICAO-IATA Dangerous Goods Regulations.

UN number: UN1268**Shipping Name:** PETROLEUM DISTILLATE, N.O.S.
(petroleum naphtha, heavy alkylate)**Class:** 3**Packing Group:** III**Marine Pollutant:** No

Note: The 801C-P product size falls under the E1 30g/30ml inner packaging limit and may be shipped as '**DG in Excepted Quantities**'. Refer to Package Mark 2.6.7.1 in **IATA** for further instruction. Document as Class **E1**.

Sea

Refer to IMDG regulations.

IMDG Marking: LTD QTY**UN number:** UN1268**Shipping Name:** PETROLEUM DISTILLATE, N.O.S.
(petroleum naphtha, heavy alkylate)**Class:** 3**Packing Group:** III**Marine Pollutant:** No

Note: Component supplier SDS transportation sections and labeling were consulted. All involved staff of shipper must be appropriately trained before involvement with the transport of this product, or work under direct supervision of a trained person.

Section 15: Regulatory Information**Canada****Domestic Substance List (DSL) / Non-Domestic Substance Lists (NDSL)**

All hazardous ingredients are listed on the DSL/NDSL.

Industry and Science Canada

MG Labels products intended for the workplace to conform to WHMIS labeling regulations. Product identification, net quantity declaration, minimum printing type size heights, and packaging of this product are in compliance.

Health Canada

Products produced by MG Chemicals intended for retail display conform to the Canadian Consumer Labeling Regulations.

USA**CAA** (Clean Air Act, USA)

This product does not contain any class 1 ozone depleting substances.

This product does not contain any class 2 ozone depleting substances.

This product does not contain substances that are listed as hazardous air pollutants.

EPCRA (Emergency Planning and Right to Know Act, USA, 40 CFR 372.45)

This product does not contain ingredients that have a reporting quantity requirements in section 313 Title III of the SARA of 1986 and 40 CFR part 372.

TSCA (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

California Proposition 65 (Chemicals known to cause cancer or reproductive toxicity, Sept 2, 2011 revision, USA).

This product does not contain any of the listed substances.

Europe**RoHS**

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, or PBDE's, and complies with European RoHS regulations.

WEEE

This product is not a piece of electrical or electronics equipment, and is therefore not governed by this regulation.

SUPER CONTACT CLEANER**801C-LIQUID****Section 16: Other Information****MSDS Prepared by** Michel Hachey**Date of Issue** 29 July 2013**Supersedes** Not applicable.**Reason for Changes:** Not applicable: New super contact cleaner formulation.**References**

1) All toxicological data were checked against the RTECS (Registry of Toxic Effects of Chemical Substances®)

2) ACGIH 2011 TLVs and BEIs: Based on the documentation of the threshold limit values for chemical substances and physical agents & biological exposure indices, American Conference of Governmental of Industrial Hygienist Cincinnati, OH (2011).

Abbreviations

ACGIH American Conference of Governmental Industrial Hygienists

EC50 Half maximal effective concentration

EL50 Half maximal effective loading

NOELR: No observable effect loading ratio

GHS: Globally Harmonized System of Classification of Labeling of Chemicals

LC50 Lethal Concentration 50%

LCLo Lowest published lethal concentration

LD50 Lethal Dose 50%

PEL Permissible Exposure Limit

STEL Short-Term Exposure Limit

TCLo Lowest published toxic concentration

TWA Time Weighted Average

VOC Volatile Organic Content

Technical Queries Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at www.mgchemicals.com.

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