

SAI Global File #004008 Burlington, Ontario, Canada

SUPER CONTACT CLEANER (WITH PPE)

801B-AEROSOL

Safety Data Sheet

Section 1: Product and Company Identification

Product Identifier and Other Means of Identification

Product Name: Super Contact Cleaner (with PPE) SDS Code: 801B-Aerosol

Related Part #: 801B-125G

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

a 1-800-340-0772 **FAX** 1-800-340-0773

E-MAIL: <u>support@mgchemicals.com</u>

WEB <u>www.mgchemicals.com</u>

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

Surrey, British Columbia V4N 4E7 CANADA

☎ 1-905-331-1396 **FAX** 1-905-331-2682

E-MAIL: info@mqchemicals.com

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

Emergency Phone Number

For hazardous material incidents ONLY—leaks, spills, fires, exposures or accidents

USA or CANADA: Call CHEMTREC **☎**: 1-800-424-9300

For emergencies involving dangerous goods; Collect 24/7

CANADA: Call CANUTEC **2:** 1-613-996-6666 or *666 on cellular phones

Date of Creation: 05 March 2014 / Ver. 2.01



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Section 2: Hazards Identification

Classification of Hazardous Chemical

WHMIS Classification







A – Aerosol Container; B5 – Flammable Aerosols; D2B – Toxic Material (Skin Irritation)

GHS Categories

Hazard Class		Category	Signal Word	Pictograms
Flammable Aerosol		2	Warning	Flame
Gas under pressure	Liquefied gas	3	Warning	Gas cylinder
Aspiration Hazard		1	Danger	Health

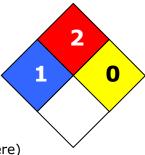
Note: The degree of severity is ranked within each hazard class from 1 (Highest Severity) to up to 5 (Lowest Severity). Severity categories do not allow comparisons between classes.

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
	H223: Flammable aerosol
	H280: Contains gas under pressure; may explode if heated
	H304: May be fatal if swallowed and enters airways
Prevention	Precautionary Statements
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use
Response	Precautionary Statements
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331	Do NOT induce vomiting.
Storage	Precautionary Statements
P405	Store locked up.
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C [122 °F].
Disposal	Precautionary Statements
P501	Dispose of contents/container in accordance to local/regional/national/international regulations.

Other Hazards

Intentional misuse and inhalation abuse may cause cardiac or central nervous systems effects. Warning

Repeated exposure may cause skin dryness or cracking.



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Section 3: Hazardous Ingredients

CAS #	Chemical Name	Wt%
64741-65-7	petroleum naphtha, heavy alkylate (mineral spirits)	60-70%
811-97-2	1,1,1,2-tetrafluoroethane	25%
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

Section 4: First-Aid Mea	
SACTION AT EIRCE ATA MAS	1-111/-1-1

Exposure Condition	GHS Code: Precautionary Statement
IF IN EYES	P305, P351, P338, P313
Immediate Symptoms	mild irritation
Response If eye irritation persists	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
IF ON SKIN (or hair)	P303 + P361+ P364 + P353 + P313
Immediate Symptoms	dry skin, mild irritation
Response	Wash with plenty of water.
If skin irritation occurs	Get medical advice/attention.
IF INHALED	P304 + P340 + P312
Immediate Symptoms	respiratory system irritation, dizziness, drowsiness, headaches, weakness, unconsciousness
Response	Remove person to fresh air (out of the contaminated zone) and keep comfortable for breathing.
IF SWALLOWED	P301 + P310 + P331 (Not a likely route of exposure under normal use)
Immediate Symptoms	See inhalation symptoms
Response	Immediately call a POISON CENTER/doctor. Do NOT induce vomiting.

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Section 5: Fire-Fighting Measures

Auto-ignition $320 \, ^{\circ}\text{C}$ Flash Point a) $51 \, ^{\circ}\text{C}$ LFL [LEL] b)1%Temperature $[608 \, ^{\circ}\text{F}]$ $[124 \, ^{\circ}\text{F}]$ UFL [UEL]10%

In case of fire P370 + P378

Extinguishing Media Use dry chemical, carbon dioxide, or chemical foam to

extinguish. Use water spray to cool containers.

Specific Hazards Vapors may accumulate in low-lying areas. Aerosol container

may erupt with force at temperatures above 50 °C [122 °F]. Produces irritating and toxic fumes in fires or in contact with hot

surfaces.

Combustion Products Produces carbon oxides (CO, CO₂) halogenated, compounds,

and hydrogen fluorides and smoke

Fire-Fighter Wear self-contained breathing apparatus for fire fighting

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 See Section 8. Avoid breathing the mist/vapors. **Protection**

Containment Remove all sources of ignition. Prevent spill from entering drains and

waterways.

Contain with inert absorbent (such as soil, sand, vermiculite).

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 towel and place dirty towels in container. Wash spill area with soap and water to remove the last traces of residue.

Disposal Dispose of spill waste according to Section 13.



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Section 7: Handling and Storage

Prevention Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Do not spray on an open flame or other ignition source.

Do not get in eye, on skin, or on clothing.

Do not eat, drink, or smoke when using this product.

Avoid breathing fume/mist/vapors. Use only outdoors or in well ventilated area. In cases of inadequate ventilation wear respiratory

protection.

Handling Wear protective gloves/clothing/eye protection.

Wash hands thoroughly after handling.

Storage Protect from sunlight. Do not expose to temperatures exceeding 50 °C

[122 °F]. Keep in well ventilated room.

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 Naphtha, Heavy Alkylate	Supplier Canada ON	1200 mg/m ³ 525 mg/m ³	Not established Not established
1,1,1,2- tetrafluoroethane	MG Chemicals ^{a)} ACGIH Canada	1,000 ppm Not established 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 ACGIH¹, OSHA, and Canadian provinces exposure limits were consulted. Limits from by RTECS database² 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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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	Lower Flammability Limit ^{b)}	1%	
Appearance	Clear, light yellow	Upper Flammability Limit ^{b)}	10%	
Odor	Slight hydrocarbon	Vapor Pressure @ 20 °C	0.5 mmHg [0.07 kPa]	
Odor Threshold	Not available	Vapor Density	~5 (Air =1)	
рH	Not available	Specific Gravity	0.81	
Freezing/Melting Point	Not available	Solubility in Water	insoluble	
Boiling Point	175 °C [347 °F]	Partition Coefficient	Not established	
Flash Point ^{a)}	51 °C [124 °F]	Auto-ignition Temperature	320 °C [608 °F]	
Evaporation Rate	moderate	Decomposition Temperature	Not available	
Flammability (solid, gas)	Not applicable	Viscosity @40 °C	≤20.5 mm²/s	

a) Pensky-Martens Closed Cup value

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

Section 10: Stability and Reactivity

Reactivity	Not available
Chemical Stability	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, alkali or alkali earth metals
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 May cause mild eye irritation.

Skin May cause mild to moderate skin irritation.

Inhalation Overexposure to propellant 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,	>7 600 mg/kg	>3 040 mg/kg	>5.9 mg/L	Not
Heavy Alkylate	Rat ^{a)}	Rabbit ^{a)}	4h Rat ^{a)}	available
1,1,1,2-	Not	Not	1,500 g/m ³	Not
tetrafluoroethane	available	available	4 h Rat	available
Mineral oil / metal	>5 000 mg/kg	Not	Not	Not
working oil (mist)	Rat	available	available	available
Propylene ether	>34 600 mg/kg	>34 600 mg/kg	>47 mg/L	Not
	Rat ^{a)}	Rabbit ^{a)}	4 h Rat ^{b)}	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



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Other Toxicological Effects

Skin corrosion/irritation Not available Serious eye damage/irritation Not available

Sensitization None known or expected

(allergic reactions)

Carcinogenicity Not classified or listed as a carcinogen by IARC, ACGIH,

Not available

Not available

CA Prop 65, or NTP (risk of cancer)

Not available Mutagenicity

(risk of heritable genetic effects)

Reproductive Toxicity (risk to

sex functions)

Teratogenicity (risk of fetus malformation)

STOT-single exposure Can affect the central nervous system and

cardiovascular systems by inhalation at extreme doses

that do not give rise to classification

STOT-repeated exposure Not available

Aspiration hazard Mixture is a class 1 aspiration hazard. It contain over

10% class 1 aspiration hazard components and has a

mixture viscosity of <20.5 mm²/s at 40 °C.



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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)* = 45% (345 g/L)

Regulated Volatile Organic Content (EPA-VOC) = 75% (578 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

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



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Section 14: Transport Information

Ground

Refer to TDG regulations (Canadian Transportation of Dangerous Goods regulations); **USA 49 CFR Regulations** (Parts 100 to 185).

Limited Quantity



UN number: UN1950 **Shipping Name**: AEROSOL,

flammable **Class:** 2.1

Packing Group: not applicable

Marine Pollutant: No

Air

Refer to ICAO-IATA Dangerous Goods Regulations.

UN number: UN1950 Shipping Name: AEROSOL,

flammable **Class:** 2.1

Packing Group: not applicable

Marine Pollutant: No



Sea

Refer to IMDG Regulations.

Limited Quantity



UN number: UN1950 Shipping Name: AEROSOL,

flammable **Class:** 2.1

Packing Group: not applicable

Marine Pollutant: No

Note: Shipper must be appropriately <u>trained and certified</u> before involvement with the transport of dangerous goods.



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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.



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Section 16: Other Information

MSDS Prepared by Michel Hachey

Date of Issue 05 March 2014

Supersedes 12 November 2013

Reason for Changes: Change to Hazcom 2012 format.

References

1) ACGIH 2013 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 (2013).

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

Abbreviations

ACGIH American Conference of Governmental Industrial Hygienists (USA)
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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