

SAI Global File #004008 Burlington, Ontario, Canada

SUPER CONTACT CLEANER (WITH PPE)

801B-AEROSOL

Safety Data Sheet

Section 1: Identification

Product Identifier and Other Means of Identification

Product Name: Super Contact Cleaner (with Polyphenyl Ether)

SDS Code: 801B-Aerosol
Related Part # 801B-125G

Recommended Use and Restriction on Use

Use: Contact cleaner

Uses Advised Against: Do not use on live circuits

Details of Manufacturer or Importer

Manufacturer

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

+1-800-340-0772 FAX +1-800-340-0773 E-MAIL support@mgchemicals.com WEB www.mgchemicals.com MG Chemicals (Head Office)

9347-193 Street

Surrey, British Columbia V4N 4E7

CANADA

+1-905-331-1396 FAX +1-905-331-2682 E-MAIL info@mgchemicals.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



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Section 2: Hazard(s) Identification

Classification of Hazardous Chemical

GHS Categories

Criteria		Category	Signal Word	Pictograms
Aspiration Hazard		1	Danger	Health
Flammable Aerosol		2	Warning	Flame
Gas Under Pressure		Liquefied gas	Warning	Gas cylinder
Skin Irritation		2	Warning	Exclamation
Specific Target Organ Toxicity	Single Exposure	3	Warning	Exclamation
Hazardous to Aquatic Environment	Chronic	2	none	Environment

Note: The degree of severity is ranked within each hazard class from

Label Elements

Signal Word	DANGER
Pictograms	Hazard Statements
	H304: May be fatal if swallowed and enters airways
	H223: Flammable aerosol
	H280: Contains gas under pressure: may explode if heated

^{1 (}Highest Severity) to up to 5 (Lowest Severity), which is opposite to HMIS and NFPA conventions. Severity category rankings do not allow comparisons between classes.



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Pictograms	Hazard Statements
^	H315: Causes skin irritation
	H336: May cause drowsiness and dizziness
***	H411: Toxic to aquatic life with long lasting effects
Prevention	Precautionary Statements
P102	Keep out of reach of children.
P261	Avoid breathing mist/vapors/spray.
P271	Use only outdoors or in a well-ventilated area.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P280	Wear protective gloves/clothing/eye protection.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
Response	Precautionary Statements
P301 + P310, P331	IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting.
P302 + P352	IF ON SKIN: Wash with plenty water.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P304 + P340, P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

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Storage	Precautionary Statements
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C [122 °F].
P403	Store in well-ventilated place.
P405	Store locked up.
Disposal	Precautionary Statements
P501	Dispose of contents/container in accordance to local/regional/international regulations.

Hazards Not Otherwise Classified

Other Criteria	Hazard Statements/Precautionary Statement	Signal Word	Pictograms
Defats skin	Repeated exposure may cause skin dryness or cracking.	None	None

Section 3: Composition/Information on Ingredients

CAS #	Chemical Name	%(weight)
64742-48-9	petroleum naphtha, heavy alkylate (mineral spirits)	77%
811-97-2	1,1,1,2-tetrafluoroethane ^{a)}	16%
8042-47-5 b)	mineral oil used in metal working	4%

- a) Also known as HFC-134a
- b) All components are listed or exempted. The base mixture has the following CAS numbers: 8042-47-5, 64742-46-7, 64742-47-8, 64742-47-9, 64742-53-6, 64742-55-8, 64742-56-9, 68551-19-9, 8042-47-5, 848301-69-9, 90622-46-1, 90622-53-0, 90622-58-5

Section 4: First-Aid Measures

Exposure Condition	GHS Code/Symptoms/Precautionary Statements
IF SWALLOWED	P301 + P310, P331
Immediate Symptoms	cough, diarrhea, sore throat, vomiting, dizziness, headache, drowsiness, nausea, unconsciousness
Response	Immediately call a POISON CENTER/doctor. Do NOT induce vomiting.

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IF ON SKIN	P302 + P352, P332 + P313, P362 + P364		
Immediate Symptoms	dry skin, redness, irritation		
Response	Wash with plenty of water.		
	If skin irritation occurs: Get medical advice/attention.		
	Take off contaminated clothing and wash it before reuse.		
IF INHALED	P304 + P340, P312		
Immediate Symptoms	dizziness, headache, drowsiness, nausea, unconsciousness		
Response	Remove person to fresh air and keep comfortable for breathing.		
	Call a POISON CENTER/doctor if you feel unwell.		
IF IN EYES	P305 + P351 + P338		
Immediate Symptoms	redness		
Response	Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.		

Section 5: Fire-Fighting Measures

Extinguishing Media	In case of fire: Use dry chemical, carbon dioxide, chemical foam, or water spray to extinguish.
	Use water spray to cool containers.
Specific Hazards	Aerosols containers may erupt with force at temperatures above 50 $^{\circ}$ C [122 $^{\circ}$ F].
	Produces irritating and toxic fumes in fires or in contact with hot surfaces.
	The vapors are heavier than air and may accumulate in low-lying areas. Vapors may travel long distances and ignite at an ignition source, which can cause a flashback or an explosion.
	Prevent fire-fighting wash from entering waterway or sewer system.
Combustion Products	Produces carbon oxides (CO, CO_2), halogenated compounds, and hydrogen fluorides.
Fire-Fighter	Wear self-contained breathing apparatus and full fire-fighting turn-out gear.



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Section 6: Accidental Release Measures

Personal Protection See personal protection recommendations in Section 8.

Precautions for Response

Avoid breathing the mist/spray/vapors. Remove or keep away all

sources of extreme heat or open flames.

Environmental Precautions

Avoid releasing to the environment. Prevent spill from entering

drains and waterways.

Containment Methods Not applicable

Cleaning Methods Collect liquid in a sealable, solvent-resistant container. Sprinkle

inert absorbent compound onto spill, then sweep into the container. Wash spill area with soap and water to remove the

last traces of residue.

Disposal Methods Dispose of spill waste according to Section 13.

Section 7: Handling and Storage

Prevention Keep out of reach of children.

Keep away from heat, hot surfaces, sparks, open flames and

other ignition sources. No smoking.

Avoid breathing mist/vapors/spray. Use only outdoors or in a

well-ventilated area.

Do not pierce or burn, even after use.

Avoid release to the environment.

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

Wear protective gloves/protective clothing/eye protection. Take

off contaminated clothing and wash it before reuse.

Wash hands thoroughly after handling.

Storage Protect from sunlight. Do not expose to temperatures exceeding

50 °C [122 °F].

Store in well-ventilated place.

Store locked up.



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Section 8: Exposure Controls/Personal Protection

Substances with Occupational Exposure Limit Values

Chemical Name	Country/ Provinces	Long Term Exposure Limits (PEL)	Short Term Exposure Limits (STEL)
1,1,1,2-tetrafluoroethane	MG Chemicals a) ACGIH	1 000 ppm Not established	Not established Not established
	U.S.A. OSHA PEL	Not established	Not established
	Canada	Not established	Not established
white mineral oil	ACGIH	5 mg/m ³	(10 mg/m³) ^{c)}
(petroleum)	U.S.A. OSHA PEL	5 mg/m ³	Not established
	U.S.A WEEL b)	5 mg/m ³	10 mg/m ³
	Canada AB	5 mg/m ³	10 mg/m ³
	Canada BC c)	1 mg/m ³	Not established
	Canada ON	5 mg/m ³	10 mg/m ³
	Canada QC	5 mg/m ³	10 mg/m ³

Note: Ingredients are listed in descending weight contribution order (from greatest to least). The ACGIH¹, OSHA (Table Z-1), and Canadian provinces exposure limits were consulted. Limits from RTECS database² and data from suppliers' SDS were also consulted. Short term exposure limits (STEL) are for 15 min and long term permissible exposure limits (PEL) for 8 h.

- a) MG Chemicals recommended limit corresponding to prevalent international threshold values
- b) Workplace Environmental Exposure Limit
- c) Based on oil mist, severely refined value.

Engineering Controls

Ventilation

Keep airborne concentrations below the occupational exposure limits (OEL).

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Personal Protective Equipment

Eye protection Wear appropriate protective eyeglasses or chemical safety

goggles.

RECOMMENDATION: Ensure that glasses have side shields for

lateral protection.

Skin Protection For likely contacts, use of protective butyl rubber or other

chemically resistant gloves.

For incidental contacts, use nitrile or other chemically resistant

gloves.

Respiratory Protection For over-exposures up to 10 x OEL of mist/vapors/spray, wear

respirator such as a half-mask respirator with organic vapor

cartridges.

Above 10 x OEL, use a positive-pressure, air-supplied respirator

or a self-contained breathing apparatus.

RECOMMENDATION: Consult your local safety supply store to ensure that your respirator has a NIOSH (U.S.) approved filter cartridges appropriate for the ingredients listed in Section 3.

The respirator should be 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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available

 $<20.5 \text{ mm}^2/\text{s}$

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Section 9: Physical and Chemical Properties

Physical State	Liquid, in an aerosol format	Lower Flammability Limit	0.7%
Appearance	Colorless	Upper Flammability Limit	5.3%
Odor	Slight hydrocarbon	Vapor Pressure @20°C	0.5 hPa [0.4 mmHg]
Odor Threshold	Not available	Vapor Density	~5 (Air =1)
pH	Not available	Specific Gravity @15.5 °C	0.77
Freezing/Melting Point	Not available	Solubility in Water	Insoluble
Boiling Point	183 °C [356 °F]	Partition Coefficient	Not available
Flash Point	58 °C [136 °F]	Auto-ignition Temperature	>320 °C [608 °F]
Evaporation	Moderate	Decomposition	Not

Temperature

Viscosity

@40 °C

Section 10: Stability and Reactivity

Not

available

Reactivity Not available

Rate

Flammability

(solid, gas)

Chemical Stability Chemically stable at normal temperatures and pressures

Conditions to Temperatures above 50 °C [122 °F], open flames, and incompatible **Avoid**

substances

Incompatibilities Strong oxidizing agents, alkali or alkali earth metals, powdered

aluminum, zinc, magnesium, and beryllium

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

Eye Contact, Ingestion, Inhalation, and Skin Contact

Symptoms Summary

Eyes May cause redness.

Inhalation May cause dizziness, headache, drowsiness, nausea, and/or

unconsciousness.

Ingestion May cause cough, diarrhea, sore throat and/or vomiting.

(also see inhalation symptoms).

Skin May cause dry skin, redness, and irritation.

Chronic Prolonged or repeated exposure may cause skin dryness, cracking, as well

as defatting the skin.

Acute Toxicity (Lethal Exposure Concentrations)

Chemical Name	LD50	LD50	LC50
	oral	dermal	inhalation
petroleum naphtha, heavy alkylate (mineral spirits)	>5 000 mg/kg	>5 000 mg/kg	>5 000 mg/m³
	Rat	Rat	Rat ^{a)}
1,1,1,2-tetrafluoroethane	Not	Not	1 500 g/m³
	established	established	4 h Rat
mineral oil used in metal working	>5 000 mg/kg	Not	Not
	Rat	established	established

Note: Toxicity data from the RTECS² and ECHA databases were consulted. The data from supplier (M)SDS were also consulted.

a) Data from supplier (M)SDS



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Other Toxicological Effects

Skin corrosion/irritation Causes skin irritation.

Serious eye Based on available data, the classification criteria are not

damage/irritation me

Sensitization Based on available data, the classification criteria are not

(allergic reactions) me

Carcinogenicity Based on available data, the classification criteria are not

(risk of cancer) me

Mutagenicity Based on available data, the classification criteria are not

(risk of heritable genetic effects) met.

Reproductive ToxicityBased on available data, the classification criteria are not

(risk to sex functions) met.

Teratogenicity Based on available data, the classification criteria are not

(risk of fetus malformation) met

STOT-single exposure Petroleum naphtha, heavy alkylate may affect the central

nervous system.

STOT-repeated exposureBased on available data, the classification criteria are not

met.

Aspiration hazard Mixture is a class 1 aspiration hazard. It contains 81.5%

class 1 aspiration hazard components and has a mixture

viscosity of <20.5 mm²/s at 40 °C.

Section 12: Ecological Information

Ecological classifications are based on the IMDG/GHS criteria in conjunction with ecotoxicological data from our suppliers, the European Chemical Agency database (http://echa.europa.eu), and other reliable sources.

The 1,1,1,2-tetrafluoroethane substance is not classifiable as an environmental toxicant.

According to data available, white mineral oil is not classifiable as a danger to the aquatic environment.

Acute Ecotoxicity

Available toxicity data does not meet classification thresholds.



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Chronic Ecotoxicity

Category 2

Harmful to aquatic life with long lasting effects

Avoid release to the environment. Collect spillage.

Biodegradability

Not available

Other Effects

Actual VOC (Volatile Organic Compounds) content according to the US (EPA) and Canadian (CEPA) authorities.

Actual VOC = 84% [647 q/L]

Section 13: Disposal Information

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

Section 14: Transport Information

Ground

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

Limited Quantity



UN number: UN1950 Shipping Name: AEROSOL,

flammable **Class: 2.1**

Packing Group: Not applicable

Marine Pollutant: Yes



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Air

Refer to ICAO-IATA Dangerous Goods Regulations.

Limited Quantity
See package
instruction Y203

Max Net Qty/Pkg



UN number: UN1950 Shipping Name: AEROSOL,

flammable **Class:** 2.1

Packing Group: Not applicable

Marine Pollutant: Yes



Sea

30 kg G

Refer to IMDG regulations.

Limited Quantity



UN number: UN1950 Shipping Name: AEROSOL,

flammable **Class:** 2.1

Packing Group: Not applicable

Marine Pollutant: Yes

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

Section 15: Regulatory Information

Canada

Domestic Substance List (DSL) / Non-Domestic Substance Lists (NDSL)

All hazardous ingredients are listed on the DSL.

Hazardous Products Act (R.S.C., 1985, c. H-3)

The safety data sheet and label comply with the Hazardous Product Act and WHMIS 2015.

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USA

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)

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 products 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 subject to the reporting requirements of 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, June 06, 2014 revision, USA).

This product does not contain any substances known to be listed in California.

Europe

RoHS (Restriction of Hazardous Substances Directive)

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

WEEE (Waste Electrical and Electronic Equipment Directive)

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

SDS Prepared by Regulatory department

Date of Review 10 February 2017

Supersedes 26 May 2016

Safety Data Sheet

Short-Term Exposure Limit

Time Weighted Average Volatile Organic Content

Lowest published toxic concentration

Reason for Changes: Reclassification in accordance new supplier composition.

Reference

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®)

SDS

STEL

TCLo TWA

VOC

Abbreviations		
ACGIH	American Conference of Governmental Industrial Hygienists (USA)	
ECHA	European Chemicals Agency	
EU	European Union	
EC50	Half maximal effective concentration	
EL50	Half maximal effective loading	
IARC	International Agency for Research on Cancer	
NOELR	No observable effect loading ratio	
NTP	National Toxicology Program	
GHS	Globally Harmonized System of Classification of Labeling of Chemicals	
LC50	Lethal Concentration 50%	
LCLo	Lowest published lethal concentration	
LD50	Lethal Dose 50%	
OEL	Occupational Exposure Limit	
PEL	Permissible Exposure Limit	



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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.

Email: support@mgchemicals.com

Mailing Addresses Manufacturing & Support Head Office

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L7L 5R6 V4N 4E7

Disclaimer This material safety data sheet is provided as an information resource only.

M.G. Chemicals, Ltd. believes the information contained herein is accurate and compiled from reliable sources. It is the responsibility of the user to query and verify any information seeming suspect where doubt on the validity may exist. The buyer assumes all responsibility of using and handling the product in accordance with local, regional, national, and international

regulations.