

SUPER WICK LEAD FREE

400-LF SERIES

Safety Data Sheet

Section 1: Identification

Product Identifier and Other Means of Identification

Product Name: Super Wick Lead Free**SDS Code:** 400-LF Series**Related Part #** 424-LF, 425-LF, 426-LF

Recommended Use and Restriction on Use

Use: Desoldering braid for lead free solders**Uses Advised Against:** Do not use brazing soldering methods such as high temperature torch soldering/torch welding.

Details of Manufacturer or Importer

ManufacturerMG Chemicals
1210 Corporate Drive
Burlington, Ontario L7L 5R6
CANADAMG Chemicals (Head Office)
9347-193 Street
Surrey, British Columbia V4N 4E7
CANADA**TEL** +1-800-340-0772**FAX** +1-800-340-0773**E-MAIL** support@mgchemicals.com**WEB** www.mgchemicals.com**TEL** +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 24/7CANADA: Call CANUTEC ☎: **+1-613-996-6666** or ***666** on cellular phones

SUPER WICK LEAD FREE

400-LF SERIES

Section 2: Hazard(s) Identification


Classification of Hazardous Chemical

GHS Categories

Criteria		Category	Signal Word	Pictograms
Sensitization	Respiratory	1	Danger	Health
Sensitization	Skin	1	Warning	Exclamation

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

Label Elements

Signal Word	DANGER
Pictograms	Hazard Statements
	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled H317: May cause an allergic skin reaction
Prevention	Precautionary Statements
P102	Keep out of reach of children.
P261	Avoid breathing fumes/vapors.
P284	In case of inadequate ventilation wear respiratory protection.
P280	Wear protective gloves.
P272	Contaminated work clothing should not be allowed out of the workplace.
Response	Precautionary Statements
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P302 + P352	IF ON SKIN: Wash with plenty of water.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.

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SUPER WICK LEAD FREE
400-LF SERIES

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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
None	None	None	None

Section 3: Composition/Information on Ingredients

CAS #	Chemical Name	%(weight)
7440-50-8	copper	95%
8050-09-7	rosin, colophony	5%

Section 4: First-Aid Measures

<i>Exposure Condition</i>	<i>GHS Code/Symptoms/Precautionary Statements</i>
IF INHALED	P304 + P340, P342 + P311
Immediate Symptoms	<i>cough, headache, sore throat, wheezing</i>
Response	Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
IF ON SKIN	P302 + P352, P333 + P313, P362 + P364
Immediate Symptoms	<i>mild irritation, redness, rash</i>
Response	Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
IF IN EYES	P305 + P351 + P338
Immediate Symptoms	<i>redness, mild irritation</i>
Response	Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Section continued on the next page

SUPER WICK LEAD FREE**400-LF SERIES***Continued ...*

IF SWALLOWED	P301 + P330, P331
Immediate Symptoms	<i>abdominal pain, nausea, vomiting</i>
Response	Rinse mouth. Do NOT induce vomiting.

Section 5: Fire-Fighting Measures

Extinguishing Media	In case of fire: Use extinguish media suitable for surrounding.
Specific Hazards	In a fire, this product can release irritating flux fumes. In presence of molten metal, do NOT use water on fire.
Combustion Products	Produces carbon oxides (CO and CO ₂) and oxidized rosin colophony by-products.
Fire-Fighter	Wear self-contained breathing apparatus and full fire-fighting turn-out gear.

Section 6: Accidental Release Measures

Personal Protection	See personal protection recommendations in Section 8.
Precautions for Response	Avoid breathing fumes/vapors. Remove or keep away all sources of extreme heat.
Environmental Precautions	Avoid releasing to the environment.
Containment Methods	Not applicable
Cleaning Methods	Collect waste in a sealable waste container.
Disposal Methods	Dispose of spill waste according to Section 13.

Section 7: Handling and Storage

Prevention	Keep out of reach of children. Avoid breathing fumes/vapors. In case of inadequate ventilation wear respiratory protection.
Handling	Wear protective gloves. Take off contaminated clothing and wash it before reuse. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash hands thoroughly after handling.
Storage	Not applicable.

SUPER WICK LEAD FREE

400-LF SERIES

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)
copper (<i>dust and mist</i>)	ACGIH	1.0 mg/m ³	Not established
	U.S.A. OSHA PEL	1.0 mg/m ³	Not established
	Canada AB	1.0 mg/m ³	Not established
	Canada BC	1.0 mg/m ³	Not established
	Canada ON	1 mg/m ³	Not established
	Canada QC	1 mg/m ³	Not established
rosin, colophony (<i>solder thermal decomposition</i>)	ACGIH	L, S, asthma	Not established
	U.S.A. OSHA PEL	Not established	Not established
	Canada AB	Not established	Not established
	Canada BC	L, S	Not established
	Canada ON	L	Not established
	Canada QC	0.1 mg/m ³	Not established

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 the RTECS² database and from suppliers' SDSs were also consulted. Short term exposure limits (STEL) are for 15 min and long term permissible exposure limits (PEL) for 8 h.

(L) Exposure by all routes should be carefully controlled to levels as low as possible.

(S) Sensitizer

Engineering Controls

Ventilation

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

RECOMMENDATION: For frequent or prolonged soldering processes, use of a local exhaust system to avoid exposure to thermal decomposition products. For example, use fume cabinet, a hood on a flexible arm, or tip-mounted fume extraction system on the soldering iron.

If the product is heated or worker has a known allergic reaction, consider using a full mask with organic vapor cartridge or with an independent air supply.

Section continued on the next page

SUPER WICK LEAD FREE**400-LF SERIES****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 incidental contacts, use nitrile or other chemically resistant gloves.

Thermal resistant gloves should be worn instead if contact with molten metal is expected.

Respiratory Protection

If exposed to fumes or dust above the exposure limit, a suitable wear respirator meeting local/regional/national guidelines.

Generally, for emergencies and exposure above 0.5 mg/m³, use a self-contained breathing apparatus with full face piece operated in a pressure positive mode.

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.

SUPER WICK LEAD FREE

400-LF SERIES

Section 9: Physical and Chemical Properties

Physical State	Solid	Lower Flammability Limit	Not applicable
Appearance	Copper	Upper Flammability Limit	Not applicable
Odor	None	Vapor Pressure @20 °C	Not available
Odor Threshold	Not available	Vapor Density	Not applicable
pH	Not available	Specific Gravity @25 °C	8.8
Freezing/Melting Point	1 057 °C [1 934 °F]	Solubility in Water	Negligible ^{a)}
Boiling Point	Not available	Partition Coefficient	Not available
Flash Point	Not applicable	Auto-ignition Temperature	Not available
Evaporation Rate	Not available	Decomposition Temperature	Not available
Flammability (solid, gas)	Not available	Viscosity @25 °C	Not applicable

a) Metal components are sparingly soluble

Section 10: Stability and Reactivity

Reactivity	When rosin flux is exposed to soldering temperatures (350–400 °C) during normal conditions of use, it produces oxidized rosins. These by-products are known skin and respiratory sensitizers.
Chemical Stability	Chemically stable at normal temperatures and pressures
Conditions to Avoid	Extreme temperatures above 450 °C, such as those due to welding
Incompatibilities	Oxidizing agents, strong acids
Polymerization	Will not occur
Decomposition	Thermal degradation produces oxidized rosin by-products that are known skin and respiratory sensitizers. For thermal decomposition, see combustion products in Section 5.

SUPER WICK LEAD FREE**400-LF SERIES****Section 11: Toxicological Information****Routes of Exposure**

Inhalation, Skin contact, Eye contact, and Ingestion

Symptoms Summary

Eyes	May cause redness and mild irritation.
Skin	May cause redness, mild irritation and rash.
Inhalation	May cause cough, headache, sore throat and wheezing. <i>Additional Desoldering By-Product Information:</i> Overexposure to dust or metal fumes from the solders may lead to pneumoconiosis (or Stannosis), anemia and central nervous system effects.
Ingestion	Low toxicity—May cause abdominal pain, nausea and vomiting
Chronic	Prolonged or repeated exposure to the oxidized rosin flux may lead to skin sensitization, respiratory sensitization and provoke asthma.

Acute Toxicity (Lethal Exposure Concentrations)

Chemical Name	LD50 oral	LD50 dermal	LC50 inhalation
copper	>5 000 mg/kg Mouse	Not available	>5.11 mg/L Rat 4 h
rosin, colophony	≥2 800 mg/kg Rat	≥2 000 mg/kg Rat	110 mg/m ³ Rat

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

Other Toxicological Effects

Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/irritation	Based on available data, the classification criteria are not met.
Sensitization (allergic reactions)	Under normal soldering temperatures, rosin produces oxidation by-products that are known respiratory and skin sensitizers. Inhalation of rosin soldering fumes is a recognized cause of occupational asthma.

Section continued on the next page

SUPER WICK LEAD FREE**400-LF SERIES**

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)	Based on available data, the classification criteria are not met.
Reproductive Toxicity (risk to sex functions)	Based on available data, the classification criteria are not met.
Teratogenicity (risk of fetus malformation)	Based on available data, the classification criteria are not met.
STOT-single exposure	Based on available data, the classification criteria are not met.
STOT-repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Not applicable. There is no category 1 components, and the kinematic viscosity is >20.5 mm ² /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

Based one transformation/dissolution data published by ECHA registrants, the classification threshold is not met for massive copper.

Based on available data for rosin, the GHS aqueous toxicity classification criteria are not met.

Acute Ecotoxicity

Based on available data, the classification criteria are not met.

Chronic Ecotoxicity

Based on available data, the classification criteria are not met.

Biodegradability

Not available

Bioaccumulation

Not available

Other Effects

Not available

SUPER WICK LEAD FREE**400-LF SERIES****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 DOT 49 CFR (Parts 100 to 185) **Regulations.**

Non Regulated

Air

Refer to ICAO-IATA Dangerous Goods Regulations.

Non Regulated

Sea

Refer to IMDG regulations.

Non Regulated

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

All hazardous ingredients are listed on the DSL.

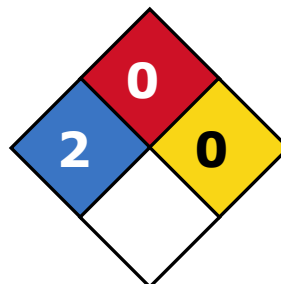
Hazardous Products Act (R.S.C., 1985, c. H-3)

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

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SUPER WICK LEAD FREE**400-LF SERIES****USA****Other Classifications****HMIS® RATING**

HEALTH:	*	2
FLAMMABILITY:		0
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 substances that are listed as hazardous air pollutants.

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

This product contains copper (CAS# 7440-50-8; reportable quantity = 5 000 lb), which is 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 of the listed substances.

Europe**RoHS** (Restriction of Hazardous Substances Directive)

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

WEEE (Waste Electrical and Electronic Equipment Directive)

This product is subject to the WEEE regulation.

SUPER WICK LEAD FREE**400-LF SERIES****Section 16: Other Information**

SDS Prepared by	Michel Hachey
Date of Review	04 July 2017
Supersedes	10 August 2016
Reason for Changes:	Revision of 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®)

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists (USA)
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
SDS	Safety Data Sheet
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.

Email: support@mgchemicals.com

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Section continued on the next page

SUPER WICK LEAD FREE**400-LF SERIES**

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