

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

# Safety Data Sheet

**Section 1: Identification****Product Identifier and Other Means of Identification****Product Name:** Super Wick for Lead Free Solder**SDS Code:** 400LF-series**Related Part #** 424LF, 425LF, 426LF**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****Manufacturer**MG Chemicals  
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CANADA**☎** +1-800-340-0772**FAX** +1-800-340-0773**E-MAIL** [support@mgchemicals.com](mailto:support@mgchemicals.com)**WEB** [www.mgchemicals.com](http://www.mgchemicals.com)**☎** +1-905-331-1396**FAX** +1-905-331-2682**E-MAIL** [info@mgchemicals.com](mailto:info@mgchemicals.com)**E-MAIL** (Competent Person): [sds@mgchemicals.com](mailto: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 FOR LEAD FREE SOLDER**
**400LF-SERIES**
**Section 2: Hazard(s) Identification**
**Classification of Hazardous Chemical**
**GHS Categories**

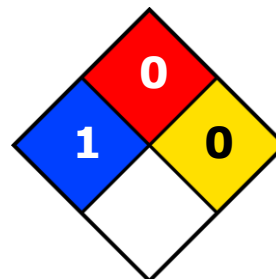
Criteria	Category	Signal Word	Pictograms
Sensitization Skin sensitizer	1	Warning	Exclamation

*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.

**Other Classifications**
**HMIS® RATING**


<b>HEALTH:</b>	<b>1</b>
<b>FLAMMABILITY:</b>	<b>0</b>
<b>PHYSICAL HAZARD:</b>	<b>0</b>
<b>PERSONAL PROTECTION:</b>	

**NFPA® 704 CODES**


*Approximate HMIS and NFPA Risk Ratings Legend:*

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

**Label Elements**

<b>Signal Word</b>	<b>WARNING</b>
<b>Pictograms</b>	<b>Hazard Statements</b>
	H317: May cause an allergic skin reaction

*Section continued on next page*

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

<b>Prevention</b>	<b>Precautionary Statements</b>
P261	Avoid breathing fumes/vapors. Wear protective gloves. Contaminated work clothing should not be allowed out of the workplace.
P280	
P272	
<b>Response</b>	<b>Precautionary Statements</b>
P302 + P352	IF ON SKIN: Wash with plenty of water.
P333 + P313	If skin irritation or rash occurs: Get medical advice.
P362 + P364	Take off contaminated clothing and wash it before reuse.
<b>Disposal</b>	<b>Precautionary Statements</b>
P501	Dispose of contents/container in accordance to local/regional/international regulations.

**Hazards Not Otherwise Classified**

Not available

**Section 3: Composition/Information on Ingredients**

<b>CAS #</b>	<b>Chemical Name</b>	<b>%(wt/wt)</b>
7440-50-8	copper	99.9%
8050-09-7	rosin, colophony	0.1%

**SUPER WICK FOR LEAD FREE SOLDER****400LF-SERIES****Section 4: First-Aid Measures**

<i>Exposure Condition</i>	<i>GHS Code/Symptoms/Precautionary Statements</i>
<b>IF ON SKIN</b>	P302 + P352, P333 + P313, P362 + P364
<b>Immediate Symptoms</b>	<i>mild irritation, rash</i>
<b>Response</b>	Wash with plenty of water. If skin irritation or rash occurs: Get medical advice. Take off contaminated clothing and wash it before reuse.
<b>IF INHALED</b>	P304 + P340
<b>Immediate Symptoms</b>	<i>wheezing</i>
<b>Response</b>	Remove person to fresh air and keep comfortable for breathing.
<b>IF IN EYES</b>	P305 + P351 + P338, P337 + P313
<b>Immediate Symptoms</b>	<i>redness, mild irritation</i>
<b>Response</b>	Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>IF SWALLOWED</b>	P301 + P330, P331
<b>Immediate Symptoms</b>	None known
<b>Response</b>	Rinse mouth. Do NOT induce vomiting.

**Section 5: Fire-Fighting Measures**

<b>Extinguishing Media</b>	In case of fire: Use extinguish media suitable for surrounding.
<b>Specific Hazards</b>	In a fire, this product can release irritating flux fumes. Do NOT use water on fires where molten metal is present.
<b>Combustion Products</b>	Produces carbon oxides (CO and CO <sub>2</sub> ).
<b>Fire-Fighter</b>	Wear self-contained breathing apparatus and full fire-fighting turn-out gear.

**SUPER WICK FOR LEAD FREE SOLDER****400LF-SERIES****Section 6: Accidental Release Measures**

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

**Section 7: Handling and Storage**

<b>Prevention</b>	Avoid breathing fumes. Do not eat, drink, or smoke when using this product.
<b>Handling</b>	Wear protective gloves. Take off contaminated clothing and wash it before reuse. Wash hands thoroughly after handling. Avoid release to the environment.
<b>Storage</b>	Not applicable.

**Section 8: Exposure Controls/Personal Protection****Routes of Entry**

Inhalation, Skin contact, Eye contact, and Ingestion

*Section continued on the next page*

**SUPER WICK FOR LEAD FREE SOLDER****400LF-SERIES****Substances with Occupational Exposure Limit Values**

Chemical Name	Country	Long Term Exposure Limits (PEL)	Short Term Exposure Limits (STEL)
copper (dust and mist)	ACGIH	1.0 mg/m <sup>3</sup>	Not established
	U.S.A. OSHA PEL	1.0 mg/m <sup>3</sup>	Not established
	Canada AB	1.0 mg/m <sup>3</sup>	Not established
	Canada BC	1.0 mg/m <sup>3</sup>	Not established
	Canada ON	1 mg/m <sup>3</sup>	Not established
	Canada QC	1 mg/m <sup>3</sup>	Not established

*Note:* Ingredients are listed in descending weight contribution order (from greatest to least). The ACGIH<sup>2</sup>, OSHA (Table Z-1), and Canadian provinces exposure limits were consulted. Limits from by RTECS database<sup>1</sup> of the Canadian Centre for Occupational Health and Safety (CCOHS) a 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.

**Engineering Controls****Ventilation**

Keep airborne concentrations below exposure limits.

**Manufacturer's Note:** Because soft soldering temperatures are generally too low to generate metal vapors, fumes or dust, the risks of metal or metal compound generation are negligible. However, the use of a local exhaust system is highly recommended.

The iron desoldering temperatures are high enough to generate potentially toxic fumes due to the volatilization or degradation of the flux and of the coating material on the soldered surface.

**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.

*Section continued on the next page*

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

**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 0.01 mg/m<sup>3</sup>, 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 your respirator has filter cartridges appropriate for the ingredients listed in section 3 of this SDS, and that the respirator is fitted to the employee by a professional.

**General Hygiene Considerations**

Wash hands thoroughly with water and soap after handling.

**Section 9: Physical and Chemical Properties**

<b>Physical State</b>	Solid	<b>Lower Flammability Limit</b>	Not applicable
<b>Appearance</b>	Copper	<b>Upper Flammability Limit</b>	Not applicable
<b>Odor</b>	None	<b>Vapor Pressure @20 °C</b>	Not available
<b>Odor Threshold</b>	Not available	<b>Vapor Density</b>	Not applicable
<b>pH</b>	Not available	<b>Specific Gravity @25 °C</b>	8.8
<b>Freezing/Melting Point</b>	1057 °C [1934 °F]	<b>Solubility in Water</b>	Negligible <sup>a)</sup>
<b>Boiling Point</b>	Not available	<b>Partition Coefficient</b>	Not available
<b>Flash Point</b>	Not applicable	<b>Auto-ignition Temperature</b>	Not available
<b>Evaporation Rate</b>	Not available	<b>Decomposition Temperature</b>	Not available
<b>Flammability (solid, gas)</b>	Not applicable	<b>Viscosity @25 °C</b>	Not applicable

a) Metal components are sparingly soluble

**SUPER WICK FOR LEAD FREE SOLDER****400LF-SERIES****Section 10: Stability and Reactivity**

<b>Reactivity</b>	Shock sensitive compounds are formed with azides, ethylene oxides, and acetylenic compounds. Reacts strongly with chlorate, bromate, or iodate oxydants causing explosion hazards.
<b>Chemical Stability</b>	Chemically stable at normal temperatures and pressures
<b>Conditions to Avoid</b>	Extreme temperatures above 450 °C, such as those due to welding
<b>Incompatibilities</b>	Oxidizing agents, strong acids, halogens
<b>Polymerization</b>	Will not occur
<b>Decomposition</b>	Will not decompose under normal conditions. For thermal decomposition, see combustion products in Section 5.

**Section 11: Toxicological Information****Routes of Exposure**

Inhalation, Skin contact, Eye contact, and Ingestion

**Symptoms Summary**

<b>Eyes</b>	May cause redness and mild irritation
<b>Skin</b>	May cause rash.
<b>Inhalation</b>	May cause 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.
<b>Ingestion</b>	None known
<b>Chronic</b>	Prolonged or repeated exposure to the oxidized rosin flux may lead to skin sensitization and provoke asthma.

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**SUPER WICK FOR LEAD FREE SOLDER****400LF-SERIES****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 <sup>3</sup> Rat

*Note:* Toxicity data from the RTECS database accessed through the Canadian Centre for Occupational Health and Safety (CCOHS)<sup>2</sup> 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)

Based on available data for the rosin, the classification criteria are not met. However, the oxidized form of rosin tested positive. Rosin is therefore classified as skin sensitizer due to its continued inclusion in many regulatory lists.

**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. This product doesn't contain any Cat 1 ingredients and has a viscosity >>20 mm/s<sup>2</sup>.

**SUPER WICK FOR LEAD FREE SOLDER****400LF-SERIES****Section 12: Ecological Information**

The IMDG Code criteria, the raw-material safety data sheets, and supporting data from the European Chemical Agency database (<http://echa.europa.eu>) were used to support the classification.

Based on 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**

Non hazardous

**Chronic Ecotoxicity**

Non hazardous

**Biodegradability**

Not available

**Bioaccumulation**

Not available

**Other Effects**

Not available

**Section 13: Disposal Information**

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

**SUPER WICK FOR LEAD FREE SOLDER****400LF-SERIES****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****WHMIS 1988 Classification**

D2B – Toxic Other (Skin sensitization)

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

All hazardous ingredients are listed on the DSL.

**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.

*Section continued on the next page*

**SUPER WICK FOR LEAD FREE SOLDER****400LF-SERIES****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 contains copper (CAS# 7440-22-4; reportable quantity = 5000 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, or PBDE's, and complies with European RoHS regulations.

**WEEE** (Waste Electrical and Electronic Equipment Directive)

This product is subject to the WEEE regulation.

**Section 16: Other Information**

**SDS Prepared by** Michel Hachey

**Date of Review** 01 June 2015

**Supersedes** 16 October 2013

**Reason for Changes:** Change over to HCS 2012 and WHMIS 2015 requirements.

*Section continued on the next page*

**SUPER WICK FOR LEAD FREE SOLDER****400LF-SERIES****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](http://www.mgchemicals.com).

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