

# 400 SERIES

# SUPER WICK FINE BRAID Safety Data Sheet

**Section 1: Identification** 

### **Product Identifier and Other Means of Identification**

Product Name: Super Wick Fine Braid

SDS Code: 400 Series

**Related Part #** 423, 423-10, 424, 424-10, 425, 425-10, 426, 426-10, 427, 427-10, 442, 443, 444, 452, 453, 454, 462, 463, 464, 472, 473, 474

#### **Recommended Use and Restriction on Use**

Use: Desoldering braid

**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 1210 Corporate Drive Burlington, Ontario L7L 5R6 CANADA

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): <a href="mailto:sds@mgchemicals.com">sds@mgchemicals.com</a>

#### **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 ☎: +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
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**

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

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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

Exposure Condition	GHS Code/Symptoms/Precautionary Statements		
IF INHALED	P304 + P340, P342 + P311		
Immediate Symptoms	cough, headache, sore throat, wheezing		
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	mild irritation, redness, rash		
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	redness, mild irritation		
Response	Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.		
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IF SWALLOWED	P301 + P330, P331
Immediate Symptoms	abdominal pain, nausea, vomiting
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.
<b>Combustion Products</b>	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.
<b>Containment Methods</b>	Not applicable
<b>Cleaning Methods</b>	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.
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#### 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	ACGIH	1.0 mg/m <sup>3</sup>	Not established
(dust and mist)	U.S.A. OSHA PEL	$1.0 \text{ mg/m}^{3}$	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
rosin, colophony	ACGIH	L, S, asthma	Not established
(solder thermal	U.S.A. OSHA PEL	Not established	Not established
decomposition)	Canada AB	Not established	Not established
	Canada BC	L, S	Not established
	Canada ON	L	Not established
	Canada QC	0.1 mg/m <sup>3</sup>	Not established

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

limits (OEL). <b>Recommendation:</b> 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.	Ventilation	Keep airborne concentrations below the occupational exposure limits (OEL).
reaction, consider using a full mask with organic vapor cartridge or with an independent air supply.		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
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		Section continued on the next page



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### **Personal Protective Equipment**

Eye protection	Wear appropriate protective eyeglasses or chemical safety goggles.
	<b>RECOMMENDATION:</b> 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.
<b>Respiratory Protection</b>	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/m <sup>3</sup> , use a self-contained breathing apparatus with full face piece operated in a pressure positive mode.
	<b>RECOMMENDATION:</b> 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.



#### Quality System Certified to ISO 9001:2008 SAI Global File #004008 Burlington, Ontario, Canada

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# 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
рН	Not available	Specific Gravity @25 °C	8.8
Freezing/Melting	1 057 °C	Solubility in	Negligible <sup>a)</sup>
Point	[1 934 °F]	Water	
Boiling Point	Not	Partition	Not
	available	Coefficient	available
Flash Point	Not	Auto-ignition	Not
	applicable	Temperature	available
Evaporation	Not	Decomposition	Not
Rate	available	Temperature	available
Flammability	Not	Viscosity	Not
(solid, gas)	available	@25 °C	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.



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**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 redeness, mild irritation and rash.
Inhalation	May cause cough, headache, sore throat and wheezing.
	Additional Desoldering By-Product Information: 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, respiratoy sensitization and provoke asthma.

### **Acute Toxicity (Lethal Exposure Concentrations)**

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

*Note:* Toxicity data from the RTECS<sup>2</sup> 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.
<b>Sensitization</b> (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.

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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.
<b>Reproductive Toxicity</b> (risk to sex functions)	Based on available data, the classification criteria are not met.
<b>Teratogenicity</b> (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 <sup>2</sup> /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 (<u>http://echa.europa.eu</u>), 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



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#### **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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#### **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.



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#### Section 16: Other Information

SDS Prepared by	Michel Hachey
Date of Review	04 July 2017
Supersedes	16 March 2017
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 <u>www.mgchemicals.com</u>.

Email: <a href="mailto:support@mgchemicals.com">support@mgchemicals.com</a>

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