Safety Data Sheet

according to WHMIS 2023 and HCS 2024

Date of issue 04/15/2025 Version number 5.01 Revision: 04/15/2025

* 1 Identification

· **Product identifier**

· **Trade name: 400-LF Series**

· **Other Means of Identification:** Super Wick Lead Free

· **Related Part Number:** 400-LF Series, 424-LF, 425-LF, 426-LF

· **Application of the substance / the mixture** 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 the supplier of the safety data sheet**

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Manufacturer/Supplier:
MG Chemicals (Head Office)
1210 Corporate Drive
Burlington, Ontario L7L 5R6
CANADA
+(1) 800-340-0772
+(1) 905-331-1396
info@mgchemicals.com

·

Distributor:
Masline
511 Clinton Ave S
Rochester, New York 14620
United States
+(1) 586-546-5373

· **Information department:** sds@mgchemicals.com

· **Emergency telephone number:**

For hazardous material incidents ONLY (leaks, spills, fires, exposures or accidents)
USA or CANADA-Call Verisk 3E at +1-866-519-4752 or +1-760-476-3962 (Service access code: 335388)

For emergencies involving the transport of dangerous goods; 24/7 service
CANADA-Call CANUTEC collect at +1-613-996-6666 or *666 on cellular phones

* 2 Hazard identification

· **Classification of the substance or mixture**

Sensitization - respiratory – Category 1	H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Sensitization - skin – Category 1	H317 May cause an allergic skin reaction.
Aquatic Chronic 2	H411 Toxic to aquatic life with long lasting effects.

· **Label elements**

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

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· **Hazard pictograms**

GHS08 GHS09

· **Signal word** Danger

· **Hazard-determining components of labeling:**
Rosin

· **Hazard statements**
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

· **Precautionary statements**

P102	Keep out of reach of children.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves.
P284	[In case of inadequate ventilation] wear respiratory protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P362+P364	Take off contaminated clothing and wash it before reuse.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P321	Specific treatment (see on this label).
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P391	Collect spillage.
P501	Dispose of contents and container in accordance with local, regional, and national regulations.

· **Other hazards** Not available

3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

7440-50-8	copper	95.0% w/w
8050-09-7	Rosin	5.0% w/w

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4 First-aid measures

· **Description of first aid measures**

· **After inhalation:**
Remove person to fresh air and keep comfortable for breathing.

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If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

· **After skin contact:**
Wash with plenty water.
If skin irritation or rash occurs: Get medical advice or attention.
Take off contaminated clothing and wash it before reuse.

· **After eye contact:**
Rinse opened eye for several minutes under running water.
If symptoms persist consult doctor.

· **After swallowing:**
Rinse mouth.
Do NOT induce vomiting.
If symptoms persist consult doctor.

· **Most important symptoms and effects, both acute and delayed**
See section 11 for additional information.

· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **Special hazards arising from the substance or mixture**
Not flammable or combustible, but burns if involved in a fire. Produces irritating smoke of unknown toxicity in fires.
Prevent fire-fighting wash from entering waterway or sewer system.
· **Hazardous combustion products:**
Carbon Oxides (COx)
oxidized rosin colophony by-products

· **Advice for firefighters**
· **Protective equipment:** Wear self-contained breathing apparatus and full fire-fighting turn-out gear.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Avoid breathing the fumes or vapors.
Remove or keep away all sources of extreme heat or open flames.

· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

· **Methods and material for containment and cleaning up:** Collect waste in a sealable waste container.

· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

7 Handling and storage

· **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Wear protective gloves and eye protection.
Wash hands and exposed skin thoroughly after handling.
Take off contaminated clothing and wash it before reuse.
Contaminated work clothing should not be allowed out of the workplace.
In case of inadequate ventilation wear respiratory protection.
· **Information about protection against explosions and fires:** No special measures required.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Keep in a dry and clean area, away from incompatible substances
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:** None.

· **Specific end use(s)** See section 1.2

8 Exposure controls/ Personal protection

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**	
7440-50-8 copper	
EL (Canada)	TWA: 1* 0.2** mg/m³ *dusts and mists; **fume, as Cu
EV (Canada)	TWA: 0.2* 1** mg/m³ as copper, *fume;**dust and mists
PEL (USA)	TWA: 1* 0.1** mg/m³ as Cu *dusts and mists **fume
REL (USA)	TWA: 1* 0.1** mg/m³ as Cu *dusts and mists **fume
TLV (USA)	TWA: 0.2* 1** mg/m³ as Cu *fume **dust/mist
8050-09-7 Rosin	
EL (Canada)	S(D), S(R)
TLV (USA)	TWA: 0.001* mg/m³ *inhalable fraction, DSEN, RSEN

· **Additional information:**
The lists that were valid during the creation were used as basis.
Refer to the national or regional occupational exposure limit regulation for abbreviations and acronyms.

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· **Exposure controls**
· **Appropriate engineering controls** No further data; see section 7.
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
· **Breathing equipment:**
Advice should be sought from respiratory protection specialists.
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
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.
· **Protection of hands:**
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.


Protective gloves: EN374

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:**
Not required.


Wear safety glasses: EN 166

* 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **Physical state**	Solid
· **Form:**	Solder braid
· **Color:**	Copper colored
· **Odor:**	Odorless

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· **Odor threshold:**	Not determined.
· **Melting point/Melting range:**	1,083 °C (33.983 °F)
· **Boiling point/Boiling range:**	Undetermined.
· **Flammability:**	Non flammable
· **Explosion limits:**	
· **Lower:**	Not applicable
· **Upper:**	Not applicable
· **Flash point:**	Not applicable.
· **Auto igniting:**	Not determined
· **Decomposition temperature:**	Not determined.
· **pH-value:**	Not applicable.
· **Viscosity:**	
· **Kinematic:**	Not applicable.
· **Dynamic:**	Not applicable.
· **Solubility in / Miscibility with**	
· **Water:**	Insoluble. Not miscible or difficult to mix.
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Vapor pressure at 20 °C (68 °F):**	0 hPa
· **Vapor pressure:**	
· **Density at 20 °C (68 °F):**	8.96 g/cm³ (74.7712 lbs/gal)
· **Relative density at 25 °C (77 °F):**	8.8
· **Vapor density (air=1):**	Not applicable.
· **Particle characteristics**	Not applicable.

· **Other information**	
· **Important information on protection of health and environment, and on safety.**	
· **Ignition temperature:**	Product is not selfigniting.
· **Danger of explosion:**	Product does not present an explosion hazard.
· **Solvent content:**	
· **Organic solvents:**	Not available
· **Solids content:**	95.0 %
· **Evaporation rate**	Not applicable.

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.

· **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.

· **Possibility of hazardous reactions** No dangerous reactions known.

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· **Conditions to avoid** Extreme temperatures above 450 °C [842 °F], such as those due to welding.

· **Incompatible materials:** No further relevant information available.

· **Hazardous decomposition products:**
Hazardous combustion products: see section 5.
Thermal degradation produces oxidized rosin by-products that are known skin and respiratory sensitizers.

11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**		
7440-50-8 copper		
Oral	LD50	>5,000 mg/kg (mouse)
Inhalative	LC50/4 h	>5.11 mg/L (rat)

· **Sensitization:**
Sensitization possible through inhalation.
Sensitization possible through skin contact.

· **Summary of effects and symptoms by route of exposure**

· **Eyes:**
redness
may cause mild irritation

· **Skin:**
redness, may cause mild irritation
rash, allergic contact dermatitis

· **Inhalation:**
cough
headache
wheezing
sore throat

· **Swallowed:**
Low toxicity:
abdominal pain
nausea
vomiting

· **Delayed and immediate effects as well as chronic effects from short and long-term exposure**
Prolonged or repeated exposure to the oxidized rosin flux may lead to skin sensitization, respiratory sensitization and provoke asthma.

· **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Irritant

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· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**
None of the ingredients is listed.

· **NTP (National Toxicology Program)**
None of the ingredients is listed.

12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:** This material and its container must be disposed of as hazardous waste.

· **Uncleaned packagings:**
· **Recommendation:**
Containers may still present a chemical hazard/ danger when empty.
Dispose of contents in accordance with all local, regional, national, and international regulations.
Where possible retain label warnings and SDS and observe all notices pertaining to the product.
· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· **UN-Number**	
· **DOT/TDG, IMDG, IATA**	not regulated
· **UN proper shipping name**	
· **DOT/TDG, IMDG, IATA**	not regulated

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· **Transport hazard class(es)**	
· **DOT/TDG, ADN, IMDG, IATA**	
· **Class**	not regulated
· **Packing group**	
· **DOT/TDG, IMDG, IATA**	Not applicable
· **Environmental hazards:**	Not applicable.
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **Special precautions for user**	Not applicable.
· **UN "Model Regulation":**	not regulated

* 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **OSHA Hazard Communication Standard (29 CFR Part 1900)**
The safety data sheet and label comply with HCS 2024.

· **Hazardous Products Act (R.S.C., 1985, c. H-3)**
The safety data sheet and label comply with the Hazardous Product Act and WHMIS 2023.

· **Sara**

· **Section 355 (extremely hazardous substances):**
None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

7440-50-8	copper

· **TSCA (Toxic Substances Control Act):**
All components have the value ACTIVE.

· **Hazardous Air Pollutants**
None of the ingredients is listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients is listed.

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· **Chemicals known to cause developmental toxicity:**
None of the ingredients is listed.

· **Carcinogenic categories**

· **TLV (Threshold Limit Value)**
None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients is listed.

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**
All ingredients are listed.

· **Canadian Non-Domestic Substances List (NDSL)**
None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 0.1%)**
None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**	
7440-50-8	copper

· **HMIS-ratings (scale 0 - 4)**
Health = * 2
Fire = 0
Reactivity = 0

· **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 not a piece of electrical or electronics equipment, and is therefore not governed by this regulation.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Regulatory department
· **Contact:** sds@mgchemicals.com
· **Version number of previous version:** 5.00
· **Date of preparation** 04/15/2025
· **Abbreviations and acronyms:**
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances

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ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety

· *** Data compared to the previous version altered.**