

SECTION 1: IDENTIFICATION

1.1. IDENTIFICATION

Product form : Mixture
Product name : Copper Braid & Lead Contact Pad
Product code : 605657, 114184, 69393, 624789

1.2. RECOMMENDED USE AND RESTRICTIONS ON USE

Use of the substance/mixture : Non-Destructive Testing

1.3. SUPPLIER

Manufacturer
Magnaflux
155 Harlem Ave.
Glenview, IL
60025
T 847-657-5300

1.4. EMERGENCY TELEPHONE NUMBER

Emergency number : CHEMTREC 800-424-9300

SECTION 2: HAZARD(S) IDENTIFICATION

2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS US classification

Acute Tox. 4 (Oral)
Carc. 1B
Repr. 1A
STOT RE 1

2.2. GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger

Hazard statements (GHS US) : Harmful if swallowed
May cause cancer
May damage fertility or the unborn child
Causes damage to organs through prolonged or repeated exposure

Precautionary statements (GHS US) : Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash hands, forearms and face thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.
If swallowed: Call a poison center or doctor if you feel unwell.
If exposed or concerned: Get medical advice/attention.
Get medical advice/attention if you feel unwell.
Rinse mouth.
Store locked up.
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. OTHER HAZARDS WHICH DO NOT RESULT IN CLASSIFICATION

No additional information available

2.4. UNKNOWN ACUTE TOXICITY (GHS US)

- 44% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
- 100% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
- 100% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. SUBSTANCES

Not applicable

3.2. MIXTURES

Name	Product identifier	%
Tin	(CAS-No.) 7440-31-5	50 – 65
Lead	(CAS-No.) 7439-92-1	30 – 45
Copper	(CAS-No.) 7440-50-8	5 – 10

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

SECTION 4: FIRST-AID MEASURES

4.1. DESCRIPTION OF FIRST AID MEASURES

- First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
- First-aid measures after skin contact : If skin irritation occurs: Wash skin with plenty of water. Obtain medical attention if irritation persists.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : IF SWALLOWED: Do NOT induce vomiting. Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell. Never give anything by mouth to an unconscious person.

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS (ACUTE AND DELAYED)

- Symptoms/effects after inhalation : May cause irritation to the respiratory tract.
- Symptoms/effects after skin contact : May cause skin irritation. Repeated exposure may cause skin dryness or cracking.
- Symptoms/effects after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
- Symptoms/effects after ingestion : Harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
- Chronic symptoms : May cause cancer. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure

4.3. IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT, IF NECESSARY

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

5.1. SUITABLE (AND UNSUITABLE) EXTINGUISHING MEDIA

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire. Carbon dioxide (CO₂). Dry chemical powder. Water spray. Alcohol resistant foam.
- Unsuitable extinguishing media : None known.

5.2. SPECIFIC HAZARDS ARISING FROM THE CHEMICAL

- Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon. Melted solder above 1000°F will liberate toxic lead fumes and aliphatic aldehydes.

5.3. SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

- General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.1.1. FOR NON-EMERGENCY PERSONNEL

No additional information available

6.1.2. FOR EMERGENCY RESPONDERS

No additional information available

6.2. ENVIRONMENTAL PRECAUTIONS

Prevent entry to sewers and public waters.

6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

- For containment : Contain spill, then place in a suitable container. Minimize dust generation. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

6.4. REFERENCE TO OTHER SECTIONS

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: HANDLING AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING

- Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/ spray. Do not eat, drink or smoke when using this product. Do not swallow. Handle and open container with care. Minimize dust generation. Lead is subject to the standard 29 CFR 1910.1025 which may contain specific requirements for handling including protective equipment, regulated areas, monitoring and medical surveillance. The employer should review the standard and assure compliance with applicable requirements.
- Hygiene measures : Wash contaminated clothing before reuse. Wash hands, forearms and face thoroughly after handling.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

- Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store locked up. Store in dry, cool, well-ventilated area.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. CONTROL PARAMETERS

Lead (7439-92-1)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (mg/m ³)	0.05 mg/m ³
ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
USA - ACGIH - Biological Exposure Indices	
Biological Exposure Indices (BEI)	200 µg/l Parameter: Lead - Medium: blood - Sampling time: not critical (Note: Persons applying this BEI are encouraged to counsel female workers of child-bearing age about the risk of delivering a child with a PbB (lead in blood level) over the current CDC reference value.)
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) (mg/m ³)	50 µg/m ³
USA - IDLH - Occupational Exposure Limits	
US IDLH (mg/m ³)	100 mg/m ³
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA) (mg/m ³)	0.05 mg/m ³
Tin (7440-31-5)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (mg/m ³)	2 mg/m ³ (inhalable particulate matter)
USA - IDLH - Occupational Exposure Limits	
US IDLH (mg/m ³)	100 mg/m ³
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA) (mg/m ³)	2 mg/m ³
Copper (7440-50-8)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (mg/m ³)	0.2 mg/m ³ (fume)
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) (mg/m ³)	0.1 mg/m ³ (fume) 1 mg/m ³ (dust and mist)

USA - IDLH - Occupational Exposure Limits	
US IDLH (mg/m ³)	100 mg/m ³ (dust, fume and mist)
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA) (mg/m ³)	1 mg/m ³ (dust and mist) 0.1 mg/m ³ (fume)

8.2. APPROPRIATE ENGINEERING CONTROLS

- Appropriate engineering controls : Ensure good ventilation of the work station.
 Environmental exposure controls : Avoid release to the environment.

8.3. INDIVIDUAL PROTECTION MEASURES/PERSONAL PROTECTIVE EQUIPMENT

Hand protection:

Wear suitable gloves

Eye protection:

Safety glasses or goggles are recommended when using product.

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Other information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: Solid
Appearance	: Gray Pad.
Color	: Gray
Odor	: No data available
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: 3164 °F (1740 °C)
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific gravity / density	: 7 g/cm ³
Solubility	: No data available
Partition coefficient n-octanol/water	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosion limits	: Not applicable
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. OTHER INFORMATION

No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. REACTIVITY

No dangerous reactions known under normal conditions of use.

10.2. CHEMICAL STABILITY

Stable under normal conditions.

10.3. POSSIBILITY OF HAZARDOUS REACTIONS

No dangerous reactions known under normal conditions of use.

10.4. CONDITIONS TO AVOID

Heat. Incompatible materials.

10.5. INCOMPATIBLE MATERIALS

Strong oxidizers. Strong acids.

10.6. HAZARDOUS DECOMPOSITION PRODUCTS

May include, and are not limited to: oxides of carbon.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

Acute toxicity (oral) : Harmful if swallowed.
 Acute toxicity (dermal) : Not classified
 Acute toxicity (inhalation) : Not classified

Copper Braid & Lead Contact Pad	
ATE US (oral)	700 mg/kg body weight

Tin (7440-31-5)	
LD50 oral rat	700 mg/kg
ATE US (oral)	700 mg/kg body weight

Skin corrosion/irritation : Not classified
 Serious eye damage/irritation : Not classified
 Respiratory or skin sensitization : Not classified
 Germ cell mutagenicity : Not classified
 Carcinogenicity : May cause cancer.

Lead (7439-92-1)	
IARC group	2A - Probably carcinogenic to humans
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen
In OSHA Hazard Communication Carcinogen list	Yes

Reproductive toxicity : May damage fertility or the unborn child.
 STOT-single exposure : Not classified
 STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.
 Aspiration hazard : Not classified
 Symptoms/effects after inhalation : May cause irritation to the respiratory tract.
 Symptoms/effects after skin contact : May cause skin irritation. Repeated exposure may cause skin dryness or cracking.
 Symptoms/effects after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
 Symptoms/effects after ingestion : Harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
 Chronic symptoms : May cause cancer. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure
 Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: ECOLOGICAL INFORMATION

12.1. TOXICITY

Ecology - general : May cause long-term adverse effects in the aquatic environment.

Lead (7439-92-1)	
LC50 fish 1	0.44 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [semi-static])
EC50 Daphnia 1	600 µg/l (Exposure time: 48 h - Species: water flea)
LC50 fish 2	1.17 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
Copper (7440-50-8)	
LC50 fish 1	0.0068 – 0.0156 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
EC50 Daphnia 1	0.03 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC50 fish 2	< 0.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

12.2. PERSISTENCE AND DEGRADABILITY

Copper Braid & Lead Contact Pad	
Persistence and degradability	Not established.

12.3. BIOACCUMULATIVE POTENTIAL

Copper Braid & Lead Contact Pad	
Bioaccumulative potential	Not established.

12.4. MOBILITY IN SOIL

No additional information available

12.5. OTHER ADVERSE EFFECTS

Other information : No other effects known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. DISPOSAL METHODS

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

SECTION 14: TRANSPORT INFORMATION

In accordance with DOT/TDG/IATA/IMDG

DOT (bulk)	: Not regulated for transport
DOT (non-bulk)	: Not regulated for transport
Transportation of Dangerous Goods	: Not regulated for transport
IATA	: Not regulated for transport
IMDG	: Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US FEDERAL REGULATIONS

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Lead	CAS-No. 7439-92-1	37 – 39%
Copper	CAS-No. 7440-50-8	5 – 10%

Products that substance/mixture are used in : A series Magnetic Wet benches, D series Magnetic Wet benches, MD series Magnetic Wet benches

Lead (7439-92-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
CERCLA RQ	10 lb no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm
Tin (7440-31-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

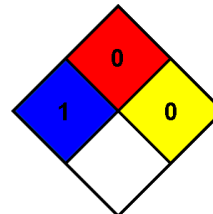
Copper (7440-50-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

CERCLA RQ

5000 lb no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm

- NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.
- NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
- NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



15.2. INTERNATIONAL REGULATIONS

No additional information available

15.3. US STATE REGULATIONS

⚠ WARNING: Cancer and reproductive harm - www.P65Warnings.ca.gov.

Lead (7439-92-1)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	Yes	Yes	Yes	15 µg/day	0.5 µg/day

Lead (7439-92-1)

U.S. - Massachusetts - Right To Know List
 U.S. - New Jersey - Right to Know Hazardous Substance List
 U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
 U.S. - Pennsylvania - RTK (Right to Know) List

Tin (7440-31-5)

U.S. - Massachusetts - Right To Know List
 U.S. - New Jersey - Right to Know Hazardous Substance List
 U.S. - Pennsylvania - RTK (Right to Know) List

Copper (7440-50-8)

U.S. - Massachusetts - Right To Know List
 U.S. - New Jersey - Right to Know Hazardous Substance List
 U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
 U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: OTHER INFORMATION

- Issue date : 09/16/2020
 Revision date : 09/16/2020
 Other information : None.
 Prepared by : Nexreg Compliance Inc.
www.Nexreg.com



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