

Safety Data Sheet

Prepared according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Version: 1.0 Issue date: 09/16/2020 Revision date: 09/16/2020

### **SECTION 1: IDENTIFICATION**

#### **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

NDT Supply.com, Inc. 7952 Nieman Road Lenexa, KS 66214-1560 USA

e-mail: sales@ndtsupply.com, www.ndtsupply.com



#### **EMERGENCY TELEPHONE NUMBER** 1.4.

**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

#### GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS 2.2.

# **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

Obtain special instructions before use. Precautionary statements (GHS US)

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.

#### OTHER HAZARDS WHICH DO NOT RESULT IN CLASSIFICATION

No additional information available

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#### 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

Chronic symptoms

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

<sup>\*</sup>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.

: 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

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#### 6.1.2. FOR EMERGENCY RESPONDERS

No additional information available

Methods for cleaning up

#### 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).

: 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

andling.

#### 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/m³)	0.05 mg/m³	
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/m³)	50 μg/m³	
USA - IDLH - Occupational Exposure Limits		
US IDLH (mg/m³)	100 mg/m³	
USA - NIOSH - Occupational Exposure Limits		
NIOSH REL (TWA) (mg/m³)	0.05 mg/m³	
Tin (7440-31-5)		
USA - ACGIH - Occupational Exposure Limits		
ACGIH TWA (mg/m³)	2 mg/m³ (inhalable particulate matter)	
USA - IDLH - Occupational Exposure Limits		
US IDLH (mg/m³)	100 mg/m³	
USA - NIOSH - Occupational Exposure Limits		
NIOSH REL (TWA) (mg/m³)	2 mg/m³	
Copper (7440-50-8)		
USA - ACGIH - Occupational Exposure Limits		
ACGIH TWA (mg/m³)	0.2 mg/m³ (fume)	
USA - OSHA - Occupational Exposure Limits		
OSHA PEL (TWA) (mg/m³)	0.1 mg/m³ (fume) 1 mg/m³ (dust and mist)	

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USA - IDLH - Occupational Exposure Limits	
US IDLH (mg/m³)	100 mg/m³ (dust, fume and mist)
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA) (mg/m³)	1 mg/m³ (dust and mist) 0.1 mg/m³ (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

#### INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES 9.1.

Physical state : Solid Appearance : Gray Pad. Color : Gray

Odor No data available : No data available Odor threshold : No data available : No data available Melting point : Not applicable Freezing point Boiling point : 3164 °F (1740 °C) : Not applicable Flash point Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : Non flammable. : No data available Vapor pressure Relative vapor density at 20 °C : No data available Relative density : No data available

Specific gravity / density : 7 g/cm<sup>3</sup> Solubility : No data available Partition coefficient n-octanol/water : No data available : Not applicable Auto-ignition temperature Decomposition temperature : No data available Viscosity, kinematic : Not applicable Viscosity, dynamic : No data available **Explosion limits** : Not applicable Explosive properties : No data available : No data available Oxidizing properties

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#### 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)	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.

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### **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	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 MD

Lead (7439-92-1)		
Listed on the United States TSCA (To	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 $\mu m$	
Tin (7440-31-5)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		

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	Copper (7440-50-8)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		ces 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 $\mu m$	

NFPA health hazard : 1 - Materials that, under emergency conditions, can cause

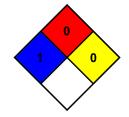
significant irritation.

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**

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Other information : None.

Prepared by : Nexreg Compliance Inc.

www.Nexreg.com



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