

**SECTION 1: Identification****1.1. Identification**

Product form : Mixture  
Product name : BRASS  
CAS-No. : 63338-02-3  
Product code : AR163, AR817, AR818, AR1969, AEB1304

**1.2. Recommended use and restrictions on use**

No additional information available

**1.3. Supplier**

Alpha Resources LLC  
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Stevensville, Michigan 49127  
USA  
T (269)465-5559  
[info@alpharesources.com](mailto:info@alpharesources.com) - [www.alpharesources.com](http://www.alpharesources.com)

**1.4. Emergency telephone number**

Emergency number : CHEMTREC Emergency Phone Number: (800) 424-9300

**SECTION 2: Hazard(s) identification****2.1. Classification of the substance or mixture****GHS US classification**

Acute toxicity (oral) Category 4	H302	Harmful if swallowed
Specific target organ toxicity (repeated exposure) Category 2	H373	May cause damage to organs through prolonged or repeated exposure

Full text of H statements : see section 16

**2.2. GHS Label elements, including precautionary statements****GHS US labeling**

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning  
Hazard statements (GHS US) : H302 - Harmful if swallowed  
H373 - May cause damage to organs through prolonged or repeated exposure  
Precautionary statements (GHS US) : P260 - Do not breathe dust/fume/gas/mist/vapors/spray.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.  
P314 - Get medical advice/attention if you feel unwell.  
P330 - Rinse mouth.  
P501 - 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)**

No additional information available

**SECTION 3: Composition/Information on ingredients****3.1. Substances**

Not applicable

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### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
COPPER	CAS-No.: 7440-50-8	60 – 70	Acute Tox. 4 (Oral), H302
ZINC	CAS-No.: 7440-66-6	30 – 40	STOT RE 2, H373

Full text of hazard classes and H-statements : see section 16

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.  
First-aid measures after skin contact : Wash skin with plenty of water.  
First-aid measures after eye contact : Rinse eyes with water as a precaution.  
First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

### 4.2. Most important symptoms and effects (acute and delayed)

No additional information available

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

### 5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product.  
Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.  
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### BRASS (63338-02-3)

No additional information available

#### COPPER (7440-50-8)

##### USA - ACGIH - Occupational Exposure Limits

Local name	Copper, as Cu
ACGIH OEL TWA	0.2 mg/m <sup>3</sup> (Fume) 1 mg/m <sup>3</sup> (Dusts and mists)
Remark (ACGIH)	TLV® Basis: Irr; GI; metal fume fever
Regulatory reference	ACGIH 2024

##### USA - OSHA - Occupational Exposure Limits

Local name	Copper
OSHA PEL TWA [1]	0.1 mg/m <sup>3</sup> (Fume (as Cu)) 1 mg/m <sup>3</sup> (Dusts and mists (as Cu))
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

#### ZINC (7440-66-6)

No additional information available

### 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:

Protective gloves

#### Eye protection:

Safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

#### Personal protective equipment symbol(s):



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### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Color	: Gold
Odor	: odorless
Odor threshold	: No data available
pH	: No data available.
Melting point	: No data available.
Freezing point	: Not applicable
Boiling point	: No data available
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.
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available.
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

The product is non-reactive under normal conditions of use, storage and transport.

#### 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

None under recommended storage and handling conditions (see section 7).

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### 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

#### BRASS (63338-02-3)

ATE US (oral)	428.571 mg/kg body weight
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<b>COPPER (7440-50-8)</b>	
LD50 oral rat	300 – 500 mg/kg Source: ECHA
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OTS 798.1100 (Acute Dermal Toxicity), Guideline: other:
LC50 Inhalation - Rat	> 5.11 mg/l air Animal: rat, Guideline: OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class Method)
ATE US (oral)	300 mg/kg body weight

<b>ZINC (7440-66-6)</b>	
LD50 oral rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LC50 Inhalation - Rat	> 5.41 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

Skin corrosion/irritation	: Not classified pH: No data available.
Serious eye damage/irritation	: Not classified pH: No data available.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.

<b>ZINC (7440-66-6)</b>	
NOAEL (oral,rat,90 days)	31.25 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard	: Not classified
Viscosity, kinematic	: Not applicable

<b>ZINC (7440-66-6)</b>	
Viscosity, kinematic	Not applicable

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
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<b>ZINC (7440-66-6)</b>	
LC50 - Fish [1]	0.439 mg/l
EC50 - Other aquatic organisms [1]	0.416 mg/l

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

<b>COPPER (7440-50-8)</b>	
Partition coefficient n-octanol/water (Log Pow)	-0.57 Source: EPISUITE

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### ZINC (7440-66-6)

Partition coefficient n-octanol/water (Log Pow)	-0.47 Source: NLM
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#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

### SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

#### 14.1. UN number

Not regulated for transport

#### 14.2. UN proper shipping name

Proper Shipping Name (DOT)	: Not applicable
Proper Shipping Name (TDG)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable

#### 14.3. Transport hazard class(es)

##### DOT

Transport hazard class(es) (DOT) : Not applicable

##### TDG

Transport hazard class(es) (TDG) : Not applicable

##### IMDG

Transport hazard class(es) (IMDG) : Not applicable

##### IATA

Transport hazard class(es) (IATA) : Not applicable

#### 14.4. Packing group

Packing group (DOT)	: Not applicable
Packing group (TDG)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable

#### 14.5. Environmental hazards

Other information : No supplementary information available.

#### 14.6. Special precautions for user

##### DOT

No data available

##### TDG

No data available

##### IMDG

No data available

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### IATA

No data available

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
COPPER	7440-50-8	Not present	-	
ZINC	7440-66-6	Not present	-	

### 15.2. International regulations

#### CANADA

#### BRASS (63338-02-3)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

#### EU-Regulations

No additional information available

#### National regulations

No additional information available

### 15.3. US State regulations

No additional information available

## SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 9/25/2024

Full text of H-phrases	
H302	Harmful if swallowed
H373	May cause damage to organs through prolonged or repeated exposure

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.