

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations, Canada Hazardous Products Regulations (HPR) / Règlement sur les produits dangereux (RPD)
 SDS ID: LACO1510018
 Issue date: 10/16/2015 Revision date: 9/26/2022 Supersedes: 1/5/2021 Version: 2.1

SECTION 1: Identification**1.1. Identification**

Product form : Mixture
 Trade name : COPPER GRADE EZ BREAK®

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Lubricant
 Restrictions on use : Any use not specified

1.3. Supplier

LA-CO Industries
 1201 Pratt Blvd.
 Elk Grove Village, IL, 60007-5746
 US
 T 847-956-7600 - F 847-956-9885
customer_service@laco.com

**1.4. Emergency telephone number**

Emergency number : 24-hour emergency: CHEMTREC- U.S. : 1-800-424-9300 International: +1-703-527-3887;
 全国应急中心 0532 8388 9090

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

Hazardous to the aquatic environment – Acute Hazard, Category 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment – Chronic Hazard, Category 1	H410	Very toxic to aquatic life with long lasting effects.

Full text of H-statements: see section 16

2.2. GHS Label elements, including precautionary statements**GHS labelling**

Hazard pictograms (GHS) :



Signal word (GHS) : Warning
 Hazard statements (GHS) : H400 - Very toxic to aquatic life.
 H410 - Very toxic to aquatic life with long lasting effects.
 Precautionary statements (GHS) : P273 - Avoid release to the environment.
 P391 - Collect spillage.
 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 data available

2.4. Unknown acute toxicity (GHS)

15.74% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
 15.74% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
 15.74% 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

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Name	Product identifier	% (w/w)	GHS classification
Copper, dusts and mists (as Cu)	CAS-No.: 7440-50-8	5 - 15	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Aluminum silicate	CAS-No.: 68476-25-5	1 - 5	Eye Irrit. 2A, H319 Carc. 1A, H350 STOT SE 3, H335
Silicon dioxide (cristobalite)	CAS-No.: 14808-60-7	1 - 5	Carc. 1A, H350
Alcohol ethoxylate phosphate ester, acid	CAS-No.: 39464-69-2	1 - 2	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	CAS-No.: 68649-42-3	0.1 - 2	Eye Irrit. 2A, H319 Aquatic Acute 1, H400 Aquatic Chronic 3, H412

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

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 general	: No special measures required.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Gently wash with plenty of soap and water.
First-aid measures after eye contact	: In case of contact, immediately flush eyes with plenty of water.
First-aid measures after ingestion	: Get medical advice/attention if you feel unwell.

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

Symptoms/effects after inhalation	: Inhalation of vapours may cause respiratory irritation.
Symptoms/effects after eye contact	: May cause slight irritation.
Symptoms/effects after ingestion	: Diarrhea. Nausea.

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	: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: None known.

5.2. Specific hazards arising from the chemical

Fire hazard	: Burning produces irritating, toxic and noxious fumes.
Explosion hazard	: Product is not explosive.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Keep upwind.
Protection during firefighting	: Wear a self contained breathing apparatus. Wear fire/flammable resistant/retardant clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Avoid contact with skin and eyes.
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6.1.1. For non-emergency personnel

Protective equipment	: Chemical goggles or safety glasses.
Emergency procedures	: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment	: Chemical goggles or safety glasses.
Emergency procedures	: Stop leak if safe to do so. Ventilate area.

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6.2. Environmental precautions

Do not discharge into drains or the environment. Prevent dispersion. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Do not allow minor leaks or spills to accumulate on walking surfaces.
Methods for cleaning up : Absorb and/or contain spill with inert material, then place in suitable container.

6.4. Reference to other sections

Section 7: Safe handling. Section 8: Personal protective equipment.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes.
Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container closed when not in use.
Incompatible products : Oxidizer.
Heat and ignition sources : Keep away from heat, sparks and flame.
Prohibitions on mixed storage : Incompatible materials.
Storage area : Store in dry, cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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No data available

Copper, dusts and mists (as Cu) (7440-50-8)

USA - ACGIH - Occupational Exposure Limits

Local name	Copper, as Cu
ACGIH TWA (mg/m ³)	0.2 mg/m ³ (Fume) 1 mg/m ³ (Dusts and mists)
Remark (ACGIH)	TLV® Basis: Irr; GI; metal fume fever
Regulatory reference	ACGIH 2021

USA - OSHA - Occupational Exposure Limits

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

Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)

No data available

Alcohol ethoxylate phosphate ester, acid (39464-69-2)

No data available

Aluminum silicate (68476-25-5)

USA - ACGIH - Occupational Exposure Limits

ACGIH TWA (mg/m ³)	1 mg/m ³ (Respirable fraction)
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Silicon dioxide (cristobalite) (14808-60-7)

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Silicon dioxide (cristobalite) (14808-60-7)

USA - ACGIH - Occupational Exposure Limits

Local name	Silica crystalline - quartz
ACGIH TWA (mg/m ³)	0.025 mg/m ³ (R - Respirable particulate matter)
Remark (ACGIH)	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)
Regulatory reference	ACGIH 2022

USA - OSHA - Occupational Exposure Limits

Local name	Quartz (Respirable) (Silica: Crystalline)
OSHA PEL TWA [2]	250 mppcf
Remark (OSHA)	Table Z-3. For OSHA PEL (TWA): Use formulas: (250 / (%SiO ₂ +5)) for mppcf and (10 mg/m ³ / (%SiO ₂ +2)) for mg/m ³ . CAS No. source: eCFR Table Z-1.
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts

USA - NIOSH - Occupational Exposure Limits

NIOSH REL TWA	0.05 mg/m ³
Remark (NIOSH)	(respirable dust)

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. Eyewash stations. Emergency safety showers should be available in the immediate vicinity of any potential exposure.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

None under normal use.

Eye protection:

Chemical goggles or safety glasses.

Respiratory protection:

None under normal use.

Personal protective equipment symbol(s):



Other information:

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	: Liquid
Appearance	: Paste
Colour	: Copper Silver Gray
Odour	: Oily
Odour threshold	: No data available

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pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 210 °C
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1.3
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

VOC content : 0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Oxidizer.

10.6. Hazardous decomposition products

Burning produces irritating, toxic and noxious fumes. Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

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Unknown acute toxicity (GHS_US)	15.74% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 15.74% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 15.74% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))
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Copper, dusts and mists (as Cu) (7440-50-8)

LD50 Oral rat	> 2500 mg/kg
LD50 Dermal rat	> 2000 mg/kg
LC50 Inhalation rat	> 5.11 mg/l/4h

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Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)

LD50 Oral rat	26100 mg/kg
ATE (oral)	26100 mg/kg bodyweight
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

Aluminum silicate (68476-25-5)

IARC group	1 - Carcinogenic to humans
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Silicon dioxide (cristobalite) (14808-60-7)

IARC group	1 - Carcinogenic to humans
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Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified

Aluminum silicate (68476-25-5)

STOT-single exposure	May cause respiratory irritation.
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STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Likely routes of exposure	: Skin and eye contact.
Symptoms/effects after inhalation	: Inhalation of vapours may cause respiratory irritation.
Symptoms/effects after eye contact	: May cause slight irritation.
Symptoms/effects after ingestion	: Diarrhea. Nausea.
Other information	: No data available

SECTION 12: Ecological information

12.1. Toxicity

Copper, dusts and mists (as Cu) (7440-50-8)

LC50 fish 1	0.2 mg/l
EC50 crustacea	0.041 mg/l
NOEC chronic fish	0.01 mg/l

Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)

LC50 fish 1	10 (10 – 35) mg/l Pimephales promelas OECD GDL 203 (water accomodated fraction)
EC50 crustacea	1 (1 – 1.5) mg/l OECD GDL 202 (water accomodated fraction)
NOEC (acute)	10 mg/l Pimephales promelas OECD GDL 203 (water accomodated fraction)
NOEC chronic crustacea	< 1 mg/l

12.2. Persistence and degradability

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Persistence and degradability	May cause long-term adverse effects in the environment.
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Copper, dusts and mists (as Cu) (7440-50-8)

Persistence and degradability	Not readily biodegradable.
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12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
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Copper, dusts and mists (as Cu) (7440-50-8)

BCF fish 1	0.009
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Bioaccumulative potential	Not expected to bioaccumulate.
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12.4. Mobility in soil

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Ecology - soil	Not established.
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12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Sewage disposal recommendations : Do not dispose of waste into sewer.
Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

14.1. UN number

DOT NA No : UN3082
UN-No. (TDG) : UN 3082
UN-No. (IMDG) : 3082
UN-No. (IATA) : 3082

14.2. UN proper shipping name

Proper Shipping Name (DOT) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (copper)
Proper Shipping Name (TDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (copper)
Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (copper)
Proper Shipping Name (IATA) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (copper)

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : 9
Hazard labels (DOT) : 9



TDG

Transport hazard class(es) (TDG) : 9



IMDG

Transport hazard class(es) (IMDG) : 9
Danger labels (IMDG) : 9

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IATA

Transport hazard class(es) (IATA) : 9
Danger labels (IATA) : 9



14.4. Packing group

Packing group (DOT) : III
Packing group (TDG) : III
Packing group (IMDG) : III
Packing group (IATA) : III

14.5. Environmental hazards

Dangerous for the environment : Yes
Marine pollutant : Yes



Other information : No supplementary information available.

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

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.

aluminium powder (pyrophoric)	CAS-No. 7429-90-5	0.5 - 1.5%
Copper, dusts and mists (as Cu)	CAS-No. 7440-50-8	5 - 15%

Copper, dusts and mists (as Cu) (7440-50-8)

CERCLA RQ	5000 lb
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15.2. International regulations

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All ingredients are listed on the Canadian Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL).

Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory

Alcohol ethoxylate phosphate ester, acid (39464-69-2)

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Alcohol ethoxylate phosphate ester, acid (39464-69-2)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)

Aluminum silicate (68476-25-5)

Listed on KECI (Korean Existing Chemicals Inventory)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Silicon dioxide (cristobalite) (14808-60-7)

Listed on IARC (International Agency for Research on Cancer)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on Taiwan National Chemical Inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
Listed on the Inventory of Existing Chemical Substances Produced or Imported in China (IECSC).
Listed on KECI (Korean Existing Chemicals Inventory)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

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State or local regulations	This product is not expected to produce Silicon dioxide particles of respirable size. California Prop. 65 warnings are not required.
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SECTION 16: Other information

Revision date	: 09/26/2022
Data sources	: ACGIH (American Conference of Government Industrial Hygienists). European Chemicals Agency (ECHA) C&L Inventory database. Accessed at http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database . Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition. National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th edition. OSHA 29CFR 1910.1200 Hazard Communication Standard. TSCA Chemical Substance Inventory. Accessed at http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html .
Other information	: None

Full text of H-statements

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H350	May cause cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

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Full text of H-statements

H412	Harmful to aquatic life with long lasting effects.
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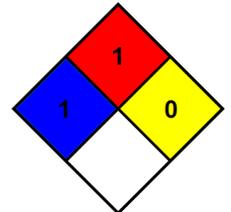
Abbreviations and acronyms

	ACGIH (American Conference of Government Industrial Hygienists)
	ATE: Acute Toxicity Estimate
	CAS (Chemical Abstracts Service) number
	CLP: Classification, Labelling, Packaging.
	DNEL: Derived No Effect Level
	EC50: Environmental Concentration associated with a response by 50% of the test population.
	GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).
	LD50: Lethal Dose for 50% of the test population
	NOEC: No Observable Effect Concentration
	OSHA: Occupational Safety & Health Administration
	PBT: Persistent, Bioaccumulative, Toxic
	PNEC: Predicted No Effect Level
	STEL: Short Term Exposure Limits
	TSCA: Toxic Substances Control Act
	TWA: Time Weighted Average

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

NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Indication of changes:

General information.

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.