



A17c Chase Brass Non-Leaded* Alloys

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Revision Date: 07/13/2018 Date of issue: 06/14/2011 Supersedes Date: 08/13/2015

Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Name: Chase Alloys C69300, C69850, C87850

Synonyms: Lead Free*, ECO BRASS; ECO BRONZE;

US Patent No.: US 6,413,330

1.2. Intended Use of the Product

No additional information available

1.3. Name, Address, and Telephone of the Responsible Party

Company

Chase Brass and Copper Co., Inc.

14212 Selwyn Drive

Montpelier, OH 43543

P.O. Box 152, 14212 Co. Rd. M-50, Montpelier, OH 43543

419-485-3193

1.4. Emergency Telephone Number

Emergency Number : 800-424-9300 (24 hour CHEMTREC)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

Not classified

2.2. Label Elements

GHS-US Labeling

No labeling applicable

2.3. Other Hazards

This product in its massive form is not known to present any hazards. Molten material may produce fumes that are toxic, or irritating, and may cause metal fume fever. Inhalation of fumes may cause metal fume fever characterized by metallic taste in the mouth, accompanied by dryness and irritation of the throat, cough, shortness of breath, general malaise, weakness, fatigue, muscle and joint pains, blurred vision and fever and chills. May also cause hemolytic anemia, liver and kidney damage, and discoloration of the hair and skin. Finely divided metallic dusts may ignite or explode. May cause allergic skin reactions in some individuals. Ingestion may cause metallic taste, abdominal pain, vomiting and diarrhea.

2.4. Unknown Acute Toxicity (GHS-US) No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Name	Product Identifier	%
Brass	(CAS No) 12597-71-6	100

3.2. Components of Alloy/Mixture

Name	Product Identifier	%
Copper	7440-50-8	65-85
Zinc	7440-66-6	15-35
Silicon	7440-21-3	1.0 -7
Phosphorous	7723-14-0	≤ 1.0
TOE (total other elements)		≤ 0.5

* Chase Brass does not incorporate any lead (or leaded materials) in the alloying process for this family of alloys. However, other contaminants (including lead, cadmium, and/or arsenic), may potentially be present individually at trace levels, all less than 0.1%.

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: Using proper respiratory protection, move the exposed person to fresh air at once. Encourage exposed person to cough, spit out, and blow nose to remove dust. Immediately call a poison center, physician, or emergency medical service.

A17c Chase Brass Non-Leaded* Alloys

Safety Data Sheet

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

First-aid Measures After Skin Contact: Remove contaminated clothing. Gently wash with plenty of soap and water. Obtain medical attention if irritation persists. Cool skin rapidly with cold water after contact with molten product. Removal of solidified molten material from skin requires medical assistance.

First-aid Measures After Eye Contact: Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if redness, pain, or irritation occurs.

First-aid Measures After Ingestion: Rinse mouth. Do not induce vomiting. Call a physician or poison control center immediately.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/Injuries: Inhalation of dusts and fumes can cause metal fume fever. Symptoms can include a metallic or sweet taste in the mouth, sweating, shivering, headache, throat irritation, fever, chills, thirstiness, muscle aches, nausea, vomiting, weakness, fatigue, and shortness of breath.

Symptoms/Injuries After Inhalation: Not expected to present a significant inhalation hazard under anticipated conditions of normal use. Inhalation of dusts and fumes can cause metal fume fever. Symptoms can include a metallic or sweet taste in the mouth, sweating, shivering, headache, throat irritation, fever, chills, thirstiness, muscle aches, nausea, vomiting, weakness, fatigue, and shortness of breath.

Symptoms/Injuries After Skin Contact: None expected under normal conditions of use. Contact with hot, molten metal will cause thermal burns.

Symptoms/Injuries After Eye Contact: None expected under normal conditions of use. Dusts caused from milling and physical alteration will likely cause eye irritation. Fumes from thermal decomposition or molten material will likely be irritating to the eyes.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable. The following applies to the product if it is cut, sanded or altered in such a way that excessive and/or significant particulates and/or dusts may be generated: Metallic dusts may ignite or explode.

Explosion Hazard: Product itself is not explosive but if dust is generated, dust clouds suspended in air can be explosive.

Reactivity: Product is stable. In molten form may react violently with water. Contact with concentrated acid or alkali can result in evolution of hydrogen gas.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: The following applies to the product if it is cut, sanded or altered in such a way that excessive and/or significant particulates and/or dusts may be generated: Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Do not breathe dust or fumes. Avoid all contact with skin, eyes, or clothing. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Do not touch or walk through spilled material. Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. If spill could potentially enter any waterway, including intermittent dry creeks, contact the U.S. COAST GUARD NATIONAL RESPONSE CENTER at 800-424-8802. In case of accident or road spill notify CHEMTREC at 800-424-9300.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain and collect as any solid. Where possible allow molten material to solidify naturally. Avoid generation of dust during clean-up of spills.

A17c Chase Brass Non-Leaded* Alloys

Safety Data Sheet

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

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Avoid actions that cause dust to become airborne during clean-up such as dry sweeping or using compressed air. Use HEPA vacuum or thoroughly wet with water to clean-up dust. Use PPE described in Section 8.

6.4. Reference to Other Sections

See Section 8, Exposure Controls and Personal Protection. See Section 13, Disposal Considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use.

Incompatible Products: Strong acids. Strong bases. Strong oxidizers.

7.3. Specific End Use(s) Not available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

8.2. Exposure Controls

Appropriate Engineering Controls

: When cutting, grinding, crushing, or drilling, provide general or local ventilation systems, as needed, to maintain airborne dust concentrations below the regulatory limits. Local vacuum collection is preferred since it prevents release of contaminants into the work area by controlling it at the source. Other technologies that may aid in controlling airborne respirable dust include wet suppression, ventilation, process enclosure, and enclosed employee work stations. Ensure that all electrical components/systems are in compliance with the National Electrical Code.

Personal Protective Equipment

: The following applies to the product if it is cut, sanded or altered in such a way that excessive and/or significant particulates and/or dusts may be generated: Protective goggles. Dust/aerosol mask. Gloves. Dustproof clothing.



Materials for Protective Clothing

: Flame retardant antistatic protective clothing.

Hand Protection

: Impermeable protective gloves. If material is hot, wear thermally resistant protective gloves.

Eye Protection

: In case of dust production: protective goggles.

Skin and Body Protection

: Wear suitable protective clothing.

Respiratory Protection

: When effective engineering controls are not feasible, appropriate respirators shall be used. Personal Protective Equipment must be selected by trained personnel, taking into account the type of hazardous materials it should protect from, the nature of the work, the expected exposure, and the facial characteristics of the wearers; proper fit is of paramount importance. Ensure the respiratory protection program meets the requirements of OSHA 29 CFR 1910.134.

Thermal Hazard Protection

: Protect skin and eyes from contact with molten material. Wear suitable thermal protective clothing.

Other Information

: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	: Solid
Appearance	: Bar stock
Odor	: No data available
Odor Threshold	: No data available
pH	: No data available
Evaporation Rate	: No data available

A17c Chase Brass Non-Leaded* Alloys

Safety Data Sheet

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

Melting Point	: 880 °C (1616.00 °F)
Freezing Point	: No data available
Boiling Point	: No data available
Flash Point	: No data available
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor Pressure	: No data available
Relative Vapor Density at 20 °C	: No data available
Relative Density	: 8.3 ± 0.125 g/cc
Specific Gravity	: 8.3 ± 0.125 g/cc
Solubility	: Insoluble in water.
Partition Coefficient: N-Octanol/Water	: No data available
Viscosity	: No data available

9.2. Other Information No additional information available

SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Product is stable. In molten form reacts violently with water. Contact with concentrated acid or alkali can result in evolution of hydrogen gas.
- 10.2. Chemical Stability:** Stable under normal conditions.
- 10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures. Use good housekeeping practices during storage, transfer, handling, to avoid excessive dust accumulation.
- 10.5. Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.
- 10.6. Hazardous Decomposition Products:** Metal oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects

- Acute Toxicity:** Oral: Not classified.
- Skin Corrosion/Irritation:** Not classified
- Serious Eye Damage/Irritation:** Not classified
- Respiratory or Skin Sensitization:** Not classified
- Germ Cell Mutagenicity:** Not classified
- Carcinogenicity:** Not classified
- Reproductive Toxicity:** Not classified
- Specific Target Organ Toxicity (Single Exposure):** Not classified
- Specific Target Organ Toxicity (Repeated Exposure):** Not classified
- Aspiration Hazard:** Not classified
- Symptoms/Injuries After Inhalation:** Not expected to present a significant inhalation hazard under anticipated conditions of normal use. Inhalation of dusts and fumes can cause metal fume fever. Symptoms can include a metallic or sweet taste in the mouth, sweating, shivering, headache, throat irritation, fever, chills, thirstiness, muscle aches, nausea, vomiting, weakness, fatigue, and shortness of breath.
- Symptoms/Injuries After Skin Contact:** None expected under normal conditions of use. Contact with hot, molten metal will cause thermal burns.
- Symptoms/Injuries After Eye Contact:** None expected under normal conditions of use. Dusts caused from milling and physical alteration will likely cause eye irritation. Fumes from thermal decomposition or molten material will likely be irritating to the eyes.
- Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

- Ecology - General** : This product while in its massive form is not known to present any hazards.
- 12.2. Persistence and Degradability** No additional information available
- 12.3. Bioaccumulative Potential** No additional information available
- 12.4. Mobility in Soil** No additional information available

A17c Chase Brass Non-Leaded* Alloys

Safety Data Sheet

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

12.5. Other Adverse Effects

Other Information : Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations. Material should be recycled if possible.

Ecology – Waste Materials: None. . Material should be recycled if possible.

SECTION 14: TRANSPORT INFORMATION

14.1. In Accordance with DOT

Not regulated

14.2. In Accordance with IMDG

Not regulated

14.3. In Accordance with IATA

Not regulated

SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulations

Copper (7440-50-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on United States SARA Section 313	
SARA Section 313 - Emission Reporting	1.0 %
Zinc (7440-66-6)	
SARA Section 313 - Emission Reporting	1.0 %
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on United States SARA Section 313	
Phosphorous (7723-14-0)	
SARA Section 313 - Emission Reporting	1.0 %
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on United States SARA Section 313	
Silicon (7440-21-3)	
SARA Section 313 - Emission Reporting	1.0 %
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on United States SARA Section 313	

15.2 US State Regulations

SARA 312 Reporting and/or labelling requirements may be applicable to components (including unintentional trace elements) of as-supplied alloy bar-stock; please check your State and Local Regulatory Requirements for any additional reporting and labelling requirements.

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





A17c Chase Brass Non-Leaded* Alloys

Safety Data Sheet

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

California Proposition 65 Note:

This family of alloys does not intentionally incorporate any lead, cadmium, or arsenic into the alloy assay. However, because these elements can exist at background levels in the raw materials utilized to manufacture the alloys, they may be present in trace amounts within the product, all at levels below 0.1%.

Lead (7439-92-1) Cadmium (7440-43-9) Arsenic (7440-38-2)	(2017 Lead average 0.06%, max 0.09%) (2017 Cadmium maximum level 0.0001%) (2017 Arsenic maximum level 0.001%)
U.S. - California - Proposition 65 - Carcinogens List	 WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov
U.S. - California - Proposition 65 - Developmental Toxicity	 WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	 WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	 WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov

15.3 REACH DISCLOSURE (Registration, Evaluation, Authorisation and Restriction of Chemicals)

The European Chemical Agency has added Lead to their Candidate List of Substances of Very High Concern (SVHC) within REACH. This inclusion may result in additional requirements for those using or importing items/articles made from these alloys within geographic areas that are specifically subject to these rules.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 07/13/2018
Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Notice: The information presented herein is based on data considered to be accurate as of the date of preparation of this Safety Data Sheet. However, no warranty or representation, express or implied is made as to the accuracy or completeness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, no responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.

SDS US (GHS HazCom)