

Arto Brick California Pavers

SAFETY DATA SHEET (SDS)

Prepared in accordance with U.S. OSHA 29 CFR 1910.1200, ANSI Z400.1, and the Canadian Hazardous Products Regulations (WHMIS 2015).

SECTION 1: IDENTIFICATION

- **Product Name:** Concrete Tile
 - Artillo Tile & Accessories
 - Roman Tile, Pavers & Accessories
 - Roman Wall Caps, Pier Caps, Pool Coping, Moldings
 - 3D Impressions Wall Veneer
 - **Manufacturer:** Arto Brick California Pavers
 - **Address:** 15209 South Broadway Street
Gardena, CA 90248
 - **Emergency Contact:** 310-768-8500
 - **Email:** info@arto.com
 - **Recommended Use:** Architectural application for floors, walls and other surfaces
 - **Restrictions on Use:** None
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SECTION 2: HAZARD(S) IDENTIFICATION

- **Hazard Classification of the Substance or Mixture (GHS-US):**
 - Skin Irritation: Category 2
 - Eye Irritation: Category 2A
 - Specific Target Organ Toxicity – Single Exposure (Respiratory Tract Irritation): Category 3
 - Specific Target Organ Toxicity – Repeated Exposure (Lungs – inhalation of dust): Category 2
 - Carcinogenicity (Inhalation of respirable crystalline silica): Category 1A

Note: Hazards are associated with the presence of respirable dust from crystalline silica and are applicable primarily during manufacturing, mechanical processing (e.g., cutting, grinding), or demolition activities. The finished tile, in its installed form, presents minimal risk under normal use.

- **GHS Label Elements:**



Category 1A (Carcinogenicity)



Category 3 (Respiratory tract irritation)

- **Signal Word:** DANGER
- **Hazard Statements:**
 - H315: Causes skin irritation

- H319: Causes serious eye irritation
- H335: May cause respiratory irritation
- H373: May cause damage to lungs through prolonged or repeated inhalation exposure to dust
- H350: May cause cancer (inhalation of respirable crystalline silica)
- **Precautionary Statements:**
 - **Prevention:**
 - P201: Obtain special instructions before use
 - P202: Do not handle until all safety precautions have been read and understood
 - P261: Avoid breathing dust
 - P264: Wash hands and exposed skin thoroughly after handling
 - P271: Use only outdoors or in a well-ventilated area
 - P280: Wear protective gloves, protective clothing, and eye/face protection
 - **Response:**
 - P302+P352: IF ON SKIN: Wash with plenty of soap and water
 - P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
 - P304+P340: IF INHALED: Move person to fresh air and keep comfortable for breathing
 - P308+P313: IF exposed or concerned: Get medical advice/attention
 - **Storage:**
 - P403+P233: Store in a well-ventilated place. Keep the container tightly closed
 - P405: Store locked up
 - **Disposal:**
 - P501: Dispose of contents/container in accordance with local, regional, national, and international regulations
- **Other Hazards Not Resulting in Classification:**
 - The product may release dust containing respirable crystalline silica during mechanical operations such as sawing, grinding, or demolition.
 - Prolonged and repeated inhalation of respirable crystalline silica dust may cause silicosis, a chronic lung disease.
 - **CALIFORNIA PROPOSITION 65: WARNING:** Cancer and Reproductive Harm— www.P65Warnings.ca.gov

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS Number	% by Weight	Classification / Notes
Silicon Dioxide (Crystalline Silica, respirable)	14808-60-7	≤0.1%	Carcinogenic via inhalation (GHS Category 1A); causes STOT RE (lungs); Proposition 65 carcinogen
Portland Cement (as part of Cementitious Binder)	65997-15-1	33.24%	Causes skin and eye irritation; may cause respiratory irritation

Ingredient	CAS Number	% by Weight	Classification / Notes
Gypsum (Calcium Sulfate Dihydrate)	13397-24-5	1.6–2.3%	Eye irritant in dust form
Aluminum Oxide (dust/fume)	1344-28-1	≤1.38%	Nuisance dust; potential respiratory irritant
Ferric/Ferrous Oxides (iron oxides)	1309-37-1 / 1345-25-1	≤0.43% / ≤0.26%	Inert dust; regulated for nuisance or welding fume exposure
Triethanolamine	102-71-6	<0.0004%	Skin/eye irritant

Note: The above components are only considered hazardous when the product is mechanically altered (cut, ground, or demolished) and dust is generated. The intact tile presents minimal risk during normal use.

SECTION 4: FIRST-AID MEASURES

- **Inhalation:** Move to fresh air. If breathing difficulty persists, seek medical attention.
- **Skin Contact:** Wash skin thoroughly with soap and water. If irritation develops, get medical advice.
- **Eye Contact:** Flush eyes with water for at least 15 minutes. Remove contact lenses if present. Get medical attention if irritation persists.
- **Ingestion:** Rinse mouth. Do not induce vomiting. Seek medical advice if discomfort occurs.

Most Important Symptoms/Effects, Acute and Delayed

- Irritation of skin, eyes, or respiratory tract from dust exposure.
- Chronic exposure to crystalline silica dust can cause silicosis and is linked to cancer.

Indication of Immediate Medical Attention and Special Treatment Needed

- Medical evaluation is recommended if symptoms persist after exposure to dust.
- If exposed to high concentrations of dust or symptoms persist, consult a physician.

SECTION 5: FIRE-FIGHTING MEASURES

- **Suitable Extinguishing Media:** Product is non-combustible. Use extinguishing media suitable for surrounding fire.
- **Hazardous Combustion Products:** None known.
- **Protective Equipment:** Wear standard protective equipment and self-contained breathing apparatus (SCBA) if nearby materials are involved in fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- **Personal Precautions:** Avoid dust generation. If dust is present, suppress using water spray. Use PPE as described in Section 8.
 - **Environmental Precautions:** Prevent runoff into storm drains or waterways.
 - **Methods for Cleanup:** Collect mechanically. Avoid dry sweeping; use wet methods or HEPA vacuum to prevent dust.
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SECTION 7: HANDLING AND STORAGE

- **Precautions for Safe Handling:** Avoid generation and inhalation of dust during mechanical processes such as cutting or grinding. Use appropriate ventilation and PPE.
- **Conditions for Safe Storage:** Store in a dry, well-ventilated area. Keep containers closed to minimize dust. Store away from incompatible materials such as strong acids.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits (OELs)

Substance	OSHA PEL	ACGIH TLV	NIOSH REL
Crystalline Silica (Quartz)	0.05 mg/m ³ (respirable)	0.025 mg/m ³ (respirable)	0.05 mg/m ³ (respirable, 10-hr TWA)
Portland Cement	5 mg/m ³ (respirable fraction)	1 mg/m ³ (respirable fraction) ¹	Not established
Aluminum Oxide (Al ₂ O ₃)	15 mg/m ³ (total dust)	1 mg/m ³ (respirable fraction)	10 mg/m ³ (total dust)
Ferric Oxide (Fe ₂ O ₃)	10 mg/m ³ (fume, as iron oxide)	5 mg/m ³ (respirable fraction)	5 mg/m ³ (dust/fume, 10-hr TWA)

Note: Values are provided where applicable based on substance presence in the product and available OSHA/ACGIH guidelines. Exposure limits apply to airborne dust generated during fabrication or demolition. Installed product does not pose exposure risk under normal conditions.

¹Note: ACGIH does not list a TLV specifically for Portland cement, but recommends limits based on nuisance dust and irritants.

Engineering Controls & Personal Protective Equipment (PPE)

- **Engineering Controls**
 - Use local exhaust ventilation when cutting or grinding.
 - Minimize airborne dust through wet methods or vacuum systems equipped with HEPA filters.
- **Personal Protective Equipment (PPE)**
 - Respiratory Protection: NIOSH-approved respirators if dust is generated.
 - Skin Protection: Gloves recommended when handling broken tiles or during installation.
 - Eye Protection: Safety glasses or goggles to prevent particulate exposure.
 - Other: Long sleeves and pants to minimize skin contact during fabrication or handling.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance:** Solid, dry tile, varies in color
- **Odor:** Odorless
- **pH (wet slurry):** ~12
- **Melting/Freezing Point:** Not Applicable. Product is a solid at room temperature and does not melt under normal conditions.
- **Boiling Point:** Not Applicable. Solid product with no boiling point.
- **Flash Point:** Not Applicable. Non-combustible material.
- **Flammability:** Not Applicable
- **Vapor Pressure:** Not Applicable
- **Solubility:** Insoluble

- **Relative Density:** ~2.3–2.5 g/cm³
 - **Partition Coefficient:** Not Applicable
 - **Decomposition Temp:** Not Determined
 - **Viscosity:** Not Applicable
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SECTION 10: STABILITY AND REACTIVITY

- **Reactivity:** Non-reactive under normal conditions.
 - **Chemical Stability:** Stable under normal use and storage.
 - **Hazardous Reactions:** None known.
 - **Conditions to Avoid:** Avoid generating dust; avoid exposure to acids which may react with cement components.
 - **Incompatible Materials:** Strong acids.
 - **Hazardous Decomposition Products:** None under normal use.
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SECTION 11: TOXICOLOGICAL INFORMATION

- **Likely Routes of Exposure:** Inhalation (dust), skin and eye contact.
 - **Symptoms**
 - **Acute Exposure:** Irritation of eyes, skin, respiratory system. Symptoms can range from mild redness, itching, or transient discomfort of the eyes, skin, or respiratory tract to more pronounced inflammation, coughing, sneezing, and difficulty breathing with higher exposures.
 - **Chronic Exposure:** Long-term inhalation of crystalline silica dust may cause silicosis and lung cancer. Initial symptoms of silicosis may include shortness of breath and cough, progressing to severe breathing difficulty, fatigue, and other complications as the disease advances.
 - **Acute Toxicity Estimates (ATE):** Data not available for the mixture as a whole. Acute toxicity is primarily associated with dust irritation upon exposure (see Symptoms).
 - **Carcinogenicity:** Carcinogenic classification applies only to respirable crystalline silica dust generated during cutting, grinding, or demolition.
 - **IARC:** Group 1 (Crystalline silica)
 - **NTP:** Known human carcinogen
 - **OSHA:** Regulated carcinogen
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SECTION 12: ECOLOGICAL INFORMATION

- **Ecotoxicity:** Not expected to cause adverse environmental effects in solid form.
 - **Persistence and Degradability:** Inorganic; not biodegradable.
 - **Bioaccumulative Potential:** None expected.
 - **Mobility in Soil:** Immobile in solid form.
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SECTION 13: DISPOSAL CONSIDERATIONS

- **Waste Disposal:** Dispose of in accordance with local, state, and federal regulations. Do not allow dust to enter water systems.
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SECTION 14: TRANSPORT INFORMATION

DOT	Not regulated
IMDG / IATA	Not regulated

SECTION 15: REGULATORY INFORMATION

- **OSHA Hazards:** Irritant, carcinogen (due to respirable crystalline silica)
- **SARA 302/304:** Not applicable.
- **SARA 311/312:** Chronic Health Hazard
- **SARA 313:** Not applicable.
- **TSCA:** All components are listed on or exempt from the U.S. TSCA Inventory.
- **California Prop 65: WARNING:** This product contains crystalline silica, a chemical known to the State of California to cause cancer.
- **WHMIS Classification (Canada):**
 - *D2A – Very toxic material (chronic effects)*
 - *D2B – Toxic material (irritant)*
 - *Note: Classification based on potential for respirable crystalline silica exposure during mechanical processing (cutting, grinding, etc.)*

SECTION 16: OTHER

- **Prepared by:** Arto
- **Date Prepared:** June 2025
- **Version:** 1.0
- **Revision Note:** This is the first formally versioned SDS for Arto Concrete Tile. It supersedes all previous unversioned or draft SDS documents. Users should discard prior versions and reference this current version moving forward.

Disclaimer: The information presented in this SDS is believed to be accurate as of the date of preparation. It is provided for guidance only and does not constitute a warranty or guarantee. This SDS is provided voluntarily in accordance with OSHA 29 CFR 1910.1200 and GHS Rev. 3, as the product may generate hazardous dust during certain mechanical processes.

End of SDS - Concrete Tiles