

**Section 1. Product and Company Identification**

**Product Name** TC106 - Tom Coleman Green to Black Satin Matt

**Synonym** Ceramic Glaze - dry




**Supplier/Manufacturer** Aardvark Clay & Supplies  
 1400 East Pomona St.  
 Santa Ana, Ca. 92705 USA  
 714-541-4157 phone  
 714-541-2021 fax  
[contact@aardvarkclay.com](mailto:contact@aardvarkclay.com)

**Emergency Phone Number** 911

**Product Use** Pottery Manufacturing

**Restrictions on use** Not applicable

**Section 2. Hazards Identification**

GHS/Hazcom 2012 Labels	GHS/Hazcom 2012 Classifications:
	<b>Health:</b>
	<b>CARCINOGENICITY (Inhalation)</b> - Category 1A (quartz) (See Section 11 for carcinogen listings)
	<b>CARCINOGENICITY (Inhalation)</b> - Category 1B (cobalt carbonate)
	<b>SPECIFIC TARGET ORGAN TOXICITY (Repeated Exposure) (respiratory tract) (inhalation)</b> - Category 1 (quartz)
	<b>SPECIFIC TARGET ORGAN TOXICITY (Repeated Exposure) (respiratory tract) (inhalation)</b> - Category 2 (iron oxide)
	<b>GERM CELL MUTAGENICITY</b> - Category 2 (cobalt carb)
	<b>RESPIRATORY SENSITIZATION</b> - Category 1 (cobalt carb)
	<b>REPRODUCTIVE TOXICITY</b> - Category 1B (cobalt carb)
	<b>SKIN IRRITANT</b> - Category 2 (quartz)
	<b>SPECIFIC TARGET ORGAN TOXICITY (Single Exposure) (respiratory tract) (inhalation)</b> - Category 3 (quartz)
	<b>SKIN SENSITIZER</b> - Category 1 (cobalt carb)
	<b>Environmental:</b>
	<b>ACUTE HAZARD TO THE AQUATIC ENVIRONMENT</b> - Category 1 (cobalt carb)
	<b>CHRONIC HAZARD TO THE AQUATIC ENVIRONMENT</b> - Category 1 (cobalt carb)
<b>Signal Word:</b>	<b>Physical:</b>
Danger	Not Hazardous

Hazard Statements:			
<b>Health:</b>			
H303	May be harmful if swallowed.	H316	Causes mild skin irritation.
H320	Causes eye irritation	H317	May cause an allergic skin irritation.
H335	May cause respiratory irritation	H334	May cause allergy or breathing difficulties if inhaled.
H350	May cause cancer.	H341	Suspected of causing genetic defects.
H372	Causes damage to organs (lungs) through prolonged or repeated exposure (inhalation).	H360	May damage fertility or the unborn child.
<b>Environmental:</b>		<b>Physical:</b>	
H401	Toxic to aquatic life.	Not hazardous	
H413	May cause long-lasting harmful effects to aquatic life.		
<b>Precaution Statements:</b>			
<b>Prevention:</b>			
P261	Avoid breathing dust/spray.	P273	Avoid release to the environment.
P264	Wash hands thoroughly after handling.	P270	Do not eat, drink, or smoke when using this product.
P272	Contaminated clothing should not be allowed out of the workplace.	P202	Do not handle until all safety precautions have been read and understood.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.	P284	[In case of inadequate ventilation] wear respiratory protection.

## Section 2. Hazards Identification

Response:			
P314	Get medical advice/attention if you feel unwell.	P391	Collect Spillage.
P341	Suspected of causing genetic defects.	P363	Wash contaminated clothing before reuse.
P305+ P351+ P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.	P301+ P330+ P331	IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.
P301+ P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.	P308+ P313	If exposed or concerned: Get medical advice/attention.
P302+ P352	IF ON SKIN: Wash with plenty of soap and water.	P304+ P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P337+ P313	If eye irritation persists, get medical advice/attention.	P333+ P313	If skin irritation or a rash occurs: Get medical advice/attention.
Storage:		Disposal:	
P402	Store in a dry place.	P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
P403	Store in a well ventilated place.		
P404	Store in a closed container.		
P405	Store locked up.		
P233	Keep container tightly closed.		
<b>Hazards not otherwise classified:</b>		Slippery when wet.	<b>% of ingredients with unknown acute toxicity:</b> None known.

## Section 3. Composition / Information on Ingredients

**Substance/Mixture:**

Mixture - A trade secret claim is made for this glaze.

Chemical	CAS Number	Ingredients	Chemical % of Mixture
Quartz, (Crystalline Silica) SiO <sub>2</sub>	CAS # 14808-60-7	Petalite, Whiting, Ball Clay	<2
Sodium-Calcium Pentaborate Octahydrate NaO <sub>2</sub> .2CaO.5B <sub>2</sub> O <sub>3</sub> .5H <sub>2</sub> O	CAS # 1319-33-1	Ulexite from Gerstley Borate	<1
Di-Calcium Hexaborate Pentahydrate Ca <sub>2</sub> B <sub>6</sub> O <sub>11</sub> .5H <sub>2</sub> O	CAS # 12291-65-5	Colemanite from Gerstley Borate	<2
Kaolinite Al <sub>2</sub> O <sub>3</sub> .2SiO <sub>2</sub> .2H <sub>2</sub> O	CAS # 1332-58-7	Ball Clay	<10
Calcium Carbonate CaCO <sub>3</sub>	CAS # 1317-65-3	Limestone (Whiting)	<5
Red Iron Oxide Fe <sub>2</sub> O <sub>3</sub>	CAS # 1309-37-1	Rutile	<1
Titanium Dioxide TiO <sub>2</sub>	CAS # 13463-67-7	Rutile	<10
Cobalt Carbonate (II) CoCO <sub>3</sub>	CAS # 513-79-1	Cobalt Carbonate	<1

## Section 4. First-Aid Measures

Description of first-aid Measures:	
<b>First-aid measures general</b>	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical attention.
<b>First-aid measures after inhalation</b>	Move victim to well ventilated area. If mechanical discomfort persists, seek medical attention.
<b>First-aid measures after skin contact</b>	Remove contaminated clothing. Wash affected area with soap and warm water. Obtain medical attention if irritation persists.
<b>First-aid measures after eye contact</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking, or redness persists.
<b>First-aid measures after ingestion</b>	Rinse mouth. Do NOT induce vomiting. Unlikely to be toxic by ingestion. If discomfort persists, seek medical attention.
Most Important Symptoms and Effects, Both Acute and Delayed:	
<b>Symptoms/injuries</b>	Causes damage to organs through prolonged or repeated exposure (inhalation).
<b>Symptoms/injuries after inhalation</b>	May cause cancer by inhalation. Dust from this product may cause irritation to the respiratory tract.
<b>Symptoms/injuries after skin contact</b>	Prolonged contact with large amounts of dust may cause mechanical irritation.
<b>Symptoms/injuries after eye contact</b>	Prolonged contact with large amounts of dust may cause mechanical irritation.
<b>Symptoms/injuries after ingestion</b>	If a large quantity has been ingested, intestinal blockage and/or gastro-intestinal irritation may result.
<b>Chronic symptoms</b>	Repeated or prolonged exposure to respirable crystalline silica dust may cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss. Acute silicosis can be fatal.

If exposed or concerned, get medical advice and attention.

## Section 5. Fire-Fighting Measures



### National Fire Protection Association (U.S.A.)

<b>Suitable extinguishing media</b>	This product is not combustible. Use extinguishing media appropriate for surrounding fire.
<b>Unsuitable extinguishing media</b>	No restrictions on extinguishing media for this mixture.
<b>Special hazards arising from the substance or mixture</b>	This mixture is not flammable and does not support fire
<b>Hazardous thermal decomposition products</b>	This mixture does not contain hazardous decomposition products.
<b>Special protective actions for fire-fighters</b>	Product can become slippery when wet.
<b>Special protective equipment for fire-fighters</b>	Fire-fighters should wear appropriate protective equipment.

## Section 6. Accidental Release Measures

<b>Use of personal precautions</b>	Avoid inhalation of dust. <b>Wear a N-95 face mask when cleaning up dust.</b>
<b>Emergency procedures</b>	There are no emergency procedures required for this mixture.
<b>Methods and Materials for containment</b>	There are no special spill measures that apply for this mixture.
<b>Clean up procedures</b>	For dusts, use a vacuum to clean up spillage. If appropriate, use gentle water spray to wet down and minimize dust generation. Place waste in a sealed container.

## Section 7. Handling & Storage

<b>Precautions for safe handling</b>	Keep bags out of direct sunlight. Do not expose dry glaze to moisture until use. Do not expose liquid glaze to freezing. Use proper lifting techniques to avoid physical injury.
<b>Recommendations on the conditions for safe storage</b>	No special storage considerations, but keep in a dry, cool location.

## Section 8. Exposure Controls / Personal Protection

Chemical	CAS Number	Occupational Exposure Limits
Quartz,(Crystalline Silica) SiO <sub>2</sub>	CAS#14808-60-7	ACGIH TLV: TWA 0.025 mg/ m <sup>3</sup> (respirable) OSHA PEL: TWA 10 mg/m <sup>3</sup> / divided by the value "%SiO <sub>2</sub> " + 2 (respirable) OSHA PEL: TWA 30 mg/m <sup>3</sup> / divided by the value "%SiO <sub>2</sub> " + 2 (total dust) CAL OSHA PEL: TWA .1 mg/ m <sup>3</sup> (respirable) CAL OSHA PEL: TWA .3 mg/ m <sup>3</sup> (total)
Sodium-Calcium Pentaborate Octahydrate Na <sub>0.2</sub> CaO.5B <sub>2</sub> O <sub>3</sub> .5H <sub>2</sub> O	CAS # 1319-33-1	ACGIH TLV: TWA 2 mg/ m <sup>3</sup> OSHA PEL: TWA 5 mg/m <sup>3</sup> (respirable) OSHA PEL: TWA 15 mg/m <sup>3</sup> (total) CAL OSHA PEL: TWA 5 mg/ m <sup>3</sup>
Di-Calcium Hexaborate Pentahydrate Ca <sub>2</sub> B <sub>6</sub> O <sub>11</sub> .5H <sub>2</sub> O	CAS # 12291-65-5	ACGIH TLV: TWA 2 mg/ m <sup>3</sup> OSHA PEL: TWA 5 mg/m <sup>3</sup> (respirable) OSHA PEL: TWA 15 mg/m <sup>3</sup> (total) CAL OSHA PEL: TWA 5 mg/ m <sup>3</sup>
Kaolinite Al <sub>2</sub> O <sub>3</sub> .2SiO <sub>2</sub> .2H <sub>2</sub> O	CAS#1332-58-7	ACGIH TLV: TWA 2 mg/ m <sup>3</sup> (respirable) / particulate matter containing no asbestos and <1% crystalline silica (respirable) OSHA PEL: TWA 5 mg/m <sup>3</sup> (respirable) OSHA PEL: TWA 15 mg/m <sup>3</sup> (total) CAL OSHA PEL: TWA 2 mg/ m <sup>3</sup> (respirable) CAL OSHA PEL: TWA not established (total)
Calcium Carbonate CaCO <sub>3</sub>	CAS# 1317-65-3	ACGIH TLV: Not Established OSHA PEL: TWA 5 mg/m <sup>3</sup> (respirable) OSHA PEL: TWA 15 mg/m <sup>3</sup> (total) CAL OSHA PEL: TWA 5 mg/ m <sup>3</sup> (respirable) CAL OSHA PEL: TWA 10 mg/ m <sup>3</sup> (total)
Red Iron Oxide Fe <sub>2</sub> O <sub>3</sub>	CAS # 1309-37-1	ACGIH TLV: TWA 5 mg/ m <sup>3</sup> (respirable) OSHA PEL: TWA 5 mg/m <sup>3</sup> (respirable) OSHA PEL: TWA 15 mg/m <sup>3</sup> (total) CAL OSHA PEL: TWA 5 mg/m <sup>3</sup> (respirable)
Titanium Dioxide TiO <sub>2</sub>	CAS# 13463-67-7	ACGIH TLV: TWA 10 mg/ m <sup>3</sup> (respirable) OSHA PEL: TWA 15 mg/m <sup>3</sup> CAL OSHA PEL: TWA 5 mg/ m <sup>3</sup> (respirable) CAL OSHA PEL: TWA 10 mg/ m <sup>3</sup> (total)
Cobalt Carbonate (II) CoCO <sub>3</sub>	CAS # 513-79-1	ACGIH TLV: TWA .02 mg/ m <sup>3</sup> (respirable) OSHA PEL: TWA .01 mg/ m <sup>3</sup> (respirable) OSHA PEL: TWA not established CAL OSHA PEL: TWA not established CAL OSHA PEL: TWA not established

## Section 8. Exposure Controls / Personal Protection

**Appropriate engineering controls:** When mixing dry glazes, use local exhaust ventilation or other engineering controls as required to maintain exposures below applicable occupational exposure limits (TLV).

### Recommendations for personal protective measures

**Local Exhaust:** When mixing glazes, use sufficient local exhaust to reduce the level of respirable dust to the applicable standards set forth in Section III - ACGIH "Industrial Ventilation, A Manual of Recommended Practice," latest edition.

**Respiratory Protection:** Dust is generated when working with dry glaze. To minimize exposure to dust and/or crystalline silica (quartz), the mixing of dry glaze materials should be conducted with sufficient ventilation. Respirable dust and quartz levels should be monitored regularly. Dust and quartz levels in excess of appropriate exposure limits should be reduced by feasible engineering controls, including (but not limited to) wet suppression, ventilation, and process enclosure. When such controls are not feasible, NIOSH/MSHA approved respirators must be worn in accordance with a respiratory protection program which meets OSHA requirements as set forth at 29 CFR 1910.134 and ANSI Z88.2-1080 - "Practices for Respiratory Protection".

**In most cases, a disposable N-95 Particulate Respirator is sufficient.**

**Eye Protection:** Use NIOSH/OSHA approved safety glasses with side shields. Face shields can also be used when mixing dry glaze. Wear tight fitting dust goggles when excessively (visible) dusty conditions are present or are anticipated. NIOSH recommends that contact lenses not be worn when working with crystalline silica dust.

**Skin Protection:** Use gloves and/or protective clothing if abrasion or allergic reactions are experienced.

**Work/Hygienic Practices:** Avoid creating and breathing dust. Wear NIOSH/MSHA approved dust mask when working in dust conditions - (N-95). Food, beverages, and smoking materials should NOT be in the work area. Persons using ceramic materials should wash thoroughly before eating, drinking, smoking, or applying cosmetics.



Protective Clothing Pictograms

N-95 face mask

## Section 9. Physical & Chemical Properties

Physical State	Powder
Appearance	Tinted Powder
Odor	None
Odor Threshold	Not Applicable
pH	6 – 8
Solubility in Water	None
Melting Point	> 1300 °C (>2380°F)
Freezing Point	< 0 °C (<32°F)
Specific Gravity / Relative Density	2.35 g/cc
Evaporation Rate	No data available
Flash Point	Not Applicable
Auto-Ignition Temperature	Not Applicable
Decomposition Temperature	Not Applicable
Flammability	Not Applicable
Vapor Pressure	Not Applicable
Vapor Density	Not Applicable
Explosive Limits	Not Applicable
Viscosity	Not Applicable
Partition Coefficient: n-octanol/water	Not Applicable
Initial Boiling Point & Boiling Range	Not Applicable

## Section 10. Stability & Reactivity

Reactivity	Hazardous reactions will not occur under normal conditions.
Chemical stability	Stable at standard temperature and pressure. No stabilizers required to maintain chemical stability.
Possibility of hazardous reactions	Hazardous polymerization will not occur.
Conditions to avoid	None known
Incompatible materials	None known
Hazardous decomposition products	None known

## Section 11. Toxicological Information

<b>Routes of Exposure</b>	Inhalation of dust, Ingestion				
<b>Descriptions of the delayed, immediate, or chronic effects from short- and long-term exposure</b>					
<b>Inhalation</b>	Inhalation of high concentrations of glaze dust may cause mechanical irritation and discomfort. Long term exposure may cause chronic effects.				
<b>Eye Contact</b>	Not a primary eye irritant. May cause mechanical irritation.				
<b>Skin Contact/Irritation</b>	Not a primary skin irritant. Not absorbed through skin. May cause dry skin.				
<b>Sensitization</b>	Not a sensitizer				
<b>Ingestion</b>	Not an ingestion hazard. If a large quantity has been ingested, intestinal blockage, and/or gastrointestinal irritation may result.				
<b>Chronic Effects</b>					
<b>OSHA Carcinogen</b>	Lung cancer – Crystalline silica has been classified by OSHA as a human lung carcinogen.				
<b>Mutagenic Effects</b>	None Known				
<b>Teratogenic Effects</b>	None Known				
<b>Developmental Toxicity</b>	None Known				
<b>Effects of Silicosis</b>		<b>Symptoms of Silicosis</b>			
Bronchitis/Chronic Obstructive Pulmonary Disorder. Tuberculosis – Silicosis makes an individual more susceptible to TB. Scleroderma – a disease affecting skin, blood vessels, joints and skeletal muscles. Possible renal disease.		Shortness of breath; possible fever. Fatigue; loss of appetite. Chest pain; dry, nonproductive cough. Respiratory failure, which may eventually lead to death.			
<b>Remarks</b>					
<b>Carcinogenicity</b>	Repeated or long term exposure to respirable crystalline silica dust may cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss. Acute silicosis can be fatal. Short term exposure is of little concern.				
<b>Numerical Measures of toxicity</b>	None Known				
<b>OSHA, IARC, and NTP Carcinogen Classifications</b>					
<b>Chemical with Carcinogen Potential</b>	<b>CAS#</b>	<b>OSHA</b>	<b>IARC</b>	<b>NTP</b>	
Quartz, (Crystalline Silica)	SiO2	CAS # 14808-60-7	Yes	Yes - Group 1	Yes
Cobalt Carbonate (II)	CoCO3	CAS # 513-79-1	-	Yes - Group 2b	No
Titanium Dioxide	TiO2	CAS # 13463-67-7	Yes	Yes - Group 2b	No

Substances, mixtures and exposure circumstances in this list have been classified by the **IARC as Group 1: The agent (mixture) is carcinogenic to humans**. The exposure circumstance entails exposures that are carcinogenic to humans. This category is used when there is *sufficient evidence* of carcinogenicity in humans. Exceptionally, an agent (mixture) may be placed in this category when evidence of carcinogenicity in humans is less than sufficient but there is *sufficient evidence* of carcinogenicity in experimental animals and strong evidence in exposed humans that the agent (mixture) acts through a relevant mechanism of carcinogenicity.

The agents in this list have been classified in **Group 2A (probable carcinogens)**<sup>[1]</sup> by the IARC (International Agency for Research on Cancer). The term "agent" encompasses both substances and exposure circumstances that pose a risk. This designation is applied when there is *limited evidence of carcinogenicity in humans as well as sufficient evidence of carcinogenicity in experimental animals*. In some cases, an agent may be classified in this group when there is *inadequate evidence* of carcinogenicity in humans along with *sufficient evidence* of carcinogenicity in experimental animals and *strong evidence* that the carcinogenesis is mediated by a mechanism that also operates in humans. Exceptionally, an agent may be classified in this group solely on the basis of *limited evidence* of carcinogenicity in humans.

Substances, mixtures and exposure circumstances in this list have been classified by the **International Agency for Research on Cancer (IARC) as Group 2B**: The agent (mixture) is **possibly carcinogenic to humans**. The exposure circumstance entails exposures that are possibly carcinogenic to humans. This category is used for agents, mixtures and exposure circumstances for which there is limited evidence of carcinogenicity in humans and less than sufficient evidence of carcinogenicity in experimental animals. It may also be used when there is inadequate evidence of carcinogenicity in humans but there is sufficient evidence of carcinogenicity in experimental animals. In some instances, an agent, mixture or exposure circumstance for which there is inadequate evidence of carcinogenicity in humans but limited evidence of carcinogenicity in experimental animals together with supporting evidence from other relevant data may be placed in this group. Further details can be found in the [preamble to the IARC Monograph](#).

## Section 12. Ecological Information (non-mandatory)

<b>Ecotoxicity</b>	None Known
<b>Biochemical oxygen demand (BOD5)</b>	None Known
<b>Chemical oxygen demand (COD)</b>	None Known
<b>Products of Biodegradation</b>	None Known
<b>Toxicity of the products of Biodegradation</b>	None Known
<b>Bioaccumulation Potential</b>	None Known
<b>Potential to move from soil to groundwater</b>	None Known
<b>Other adverse effects</b>	None Known

## 13. Disposal Considerations

<b>Personal Protection</b>	Refer to Section 8: "Recommendations for Personal Protective Measures" when disposing of glaze waste.
<b>Appropriate disposal containers</b>	Standard waste disposal containers – no specials requirements.
<b>Appropriate disposal methods</b>	Disposal of this product should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. In most cases, this is normal waste disposal. The generation of waste should be avoided or minimized. Dispose of non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.
<b>Physical and chemical properties that may affect disposal</b>	Glaze waste should be placed in a sealed container or in a manner that reduces or eliminates the release of the product. Packaging should be recycled before disposal.
<b>Sewage disposal</b>	Do not dispose of into sinks or toilets. They will clog. Never dispose of this product into a sewer system.
<b>Special precautions for landfills or incineration activities</b>	There are no special precautions for disposal in a landfill. This product is non-combustible and is not suitable for incineration.

## Section 14. Transportation Information

Regulatory Information	UN Number	UN Proper Shipping Name	Transport Hazard Class	Packing Group Number	Bulk Transport Guidance	Special Precautions
<b>DOT Classification</b>	Not regulated	-	-	-	-	-
<b>TDG Classification</b>	Not regulated	-	-	-	-	-
<b>ADR/RID Class</b>	Not regulated	-	-	-	-	-
<b>IMDG Class</b>	Not regulated	-	-	-	-	-
<b>IATA-DGR Class</b>	Not regulated	-	-	-	-	-

## Section 15. Regulatory Information

<b>TSCA – Toxic Substances Control Act - EPA</b>	Quartz and other chemicals are listed in the TSCA Chemical Substance Inventory
<b>California Prop. 65</b>	WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
<b>SARA/Title III (Emergency Planning &amp; Community Right-to-Know Act)</b>	This mixture contains no substances at or above the reporting threshold under Section 313, based on available data.

## Section 16. Other Information

### Definitions

**OSHA** means Occupational Safety & Health Administration

**IARC** means International Agency for Research on Cancer

**NTP** means National Toxicology Program

**CAS** means Chemical Abstract Service

**ACGIH** means American Conference of Governmental Industrial Hygienists

**CAL-OSHA** means California OSHA, most CAL-OSHA standards defer to the federal OSHA standards

**OSHA** means Occupational Safety & Health Administration

**OSHA PEL** means OSHA Permissible Exposure Limit

**TWA** means Time Weighted Average (average exposure on the basis of an 8h/day, 40h/week work schedule)

**TLV** means Threshold Limit Value - American Conference of Governmental Industrial Hygienists (ACGIH)

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