SAFETY DATA SHEET (SDS)

Reviewed On: 11/21/2016

Section 1. Identification

Trade Name: **PG801 Apple Crackle Raku Glaze**
PG802 Copper Flash raku Glaze
PG803 Copper Penny Raku Glaze
PG806 Midnight Luster Raku Glaze
PG807 Opal Shimmer Raku Glaze
PG808 Beetle Juice Raku Glaze
PG809 Alligator Raku Glaze
PG810 Piepenburg Red Bronze Raku Glaze
PG811 Blue Dolphin Raku Glaze
PG812 Copper Ridge Raku Glaze
PG813 Michigan Patina Raku Glaze
PG823 purple Passion Raku Glaze
PG824 Firedance Raku Glaze

Common Names : **Raku Luster Ceramic Glaze Cone 06**

Product Use : **Ceramic Glaze -Specialty**

Details of the supplier of the safety data sheet
This Safety Data Sheet has been updated in accordance with the Global Harmonized System (GHS)

Manufacturer/Supplier:

Georgies Ceramic and Clay Co.
756 N.E. Lombard St.
Portland, OR 97211
Tel: (503) 283-1353
Fax: (503) 283-1387

Information Department: *Techincal Department (503) 283-1353*
Emergency Telephone Number:
CHEMTREC 24-Hour Emergency Reponse Telephone Number: (800) 424-9300

Section 2. Hazard(s) Identification

Acute Tox.4-H302

GHS label elements/ Hazard pictograms

Signal Word:
Warning

Classification of the substance or mixture Carcinogenicity (inhalation) – Category 1A and Specif organ toxicity (Repeated Exposure) (Respiratory tract through inhalation_ - Category 1

Hazard Statements H302 Harmful if swallowed.

Precautionary Statements .
(P280) Wear protective gloves when working with liquid glaze application. Wear ,eye and resipatory protective when firing .Raku firing produces heavy amounts od smoke which can irritate eyes and respiratory sysytem.
P264 Wash contaminated skin thoughly after handling.
P270 Do not eat, drink or smoke when using this product.
P301 + P310 If swallowed: Immediately call a poisin center/doctor.
P330 Rinse mouth.
P501 Dispose of contents / container in accorance with national regulations.



Section 3. Composition/Information On Ingredients

Substances / Mixtures Mixture – A trade secret claim is made for this item

Component	CAS #	Approx. % by Wt.
Kaolinite	1332-58-7	0-14%
Feldspar	37244-96-5	7-24%
Calcium Borate	12007-56-6	14-78%
Crystaline Silica - Quartz	14808-60-7	0-14%
Copper or Copper Compounds	7440-50-8	2-14%
Cobalt or Cobalt Compounds	1307-96-6	0-18%
Iron Oxide	1309 -37 -1	0-3%
Tin Oxide	18282-10-5	0-6%

Supplimental Label Information **Warning:** MAY BE HARMFUL IF SWALLOWED. Contains COPPER. PRECAUTIONS: Keep in original container. Wash hands immediately after use . When using do not eat,drink or smoke. NOT FOR SPRAY APPLICATION. NOT FOR USE IN HEATH CARE FACILITIES. KEEP OUT OF REACH OF CHILDREN. FIRST

AID TREATMENT: If swallowed get prompt medical attention. Further information,contact a national poison control number; 800-222-1222.

Section 4. First-Aid Measures

Eye Contact If eye contact occurs, rinse immediately with plenty of water. If irritation persists , seek medical attention.

Skin Contact If irritation occurs, wash thouroughly with water. If irritation persists , seek medical attention.

Inhalation This product is available only in liquid form. Unlikely route of exposure as the product does not contain volatile substances.

Ingestion Do not induce vomiting.Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if any discomfort continues.

Symtoms and Effects, both Acute and Delayed

Eye Contact .Read section 2 for anyspecific precautions with this product. In general most ceramic and special products contain materials that may be abrasive to eyes. Keeping materials from contacting eyes is prudent.If contact does occur, flush with water. Do not rub.

Skin Contact Read section 2 for specific precautions associated with the use of this product. In general most ceramic glazes, clays and special products will tend to have a drying effect on the skin and may cause some sensitivity to users with sensitive skin.

Inhalation Read section 2 for any specific precautions associated with the use of this product. In general, breathing any type od dust/mist can and may aggravate irritation of the throat and lungs. This product is available in liquid form only.

Ingestion Read section 2 for any specific precautions associated with the use of this product. Products with specific warnings about ingestion will give guidance there.

Section 5. Fire-Fighting Measures

Extinguishing Media Use appropriate extinguishing media for surronding fire.

Specific Hazards This product is not believed to present a hazard due to it's phyical nature.

Protective actions and equipment for fire-fighters Fire-fighters should use protective equipment appropiate for surronding materials.

Section 6. Accidental Release Measures

Clean-up Methods If appropriate, use gentle water spray to wet down and minimize dust generation.

Personal Precautions and Personal Protective Equipment Wear appropriate protective equipment and clothing during clean up. When dry sweepning use NIOSH approved resirators when dust levels excced exposure limits.

Emergency Procedures and Methods of Containment There are no emergency procedures required for this mixture. Place dry clay dust in sealed sealed conatiner for re-use or proper disposal.

Section 7. Handling and Storage

Precautions for safe Handling Read label before use. Do not eat,drink or smaoke when using this product. Good personal hygiene proceedures should be implimented. Wash hands and any other contaminated areas of the body wit soap and water before leaving the work site. Wet clean all surfaces to avoid dust .

Recommendations on the conditions for safe storage Store tightly closed ,original container in cool dry place.

Section 8. Exposure Controls/Personal Protection

Airborne Exposure Limits

Hazardous Ingredient	Wt.% approx.	Cas#	OSHA PEL*/ACGIH TLV*
Kaolinite	0-14%	1332-58-7	5mg/3mg 2mg/3mg respirable
Nepheline Syenite	7-24%	37244-96-5	Not Hazardous
Calcium Borate	14-78%	12007-56-6	5mg/m3 2mg/m3 (TWA) respirable
Crystalline Silica-Quartz	0-14%	14808-60-7	0.1mg/m3 0.025mg/m3 respirable
Copper Compounds	2-14%	7440-50-8	1mg/m3 1mg/m3 (TWA) respirable
Cobalt Combounds	0-18%	1307-96-6	0.1mg/m3 0.02mg/m3 respirable
Iron Oxide	0-3%	1309-37-1	5mg/m3 5mg/m3 (TWA) respirable
Tin Oxide	0-6%	18282-10-5	2mg/m3 (TWA) respirable

This product is ONLY AVAILABLE in Liquid Form .

Personal Protective Equipment (PPE)

Respiratory	Dust is generated when working with dry clay mixture. To minimize exposure to dust and/or crystalline silica, cutting or sanding dry clay products 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 sanding, 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 CFR1910.134 and ANSI Z88.2-1080 "Practices for Respiratory Protection". In most cases, a disposable N-95 Particulate Respirator is sufficient.
Eyes	Use of NIOSH/OSHA approved safety glasses with side shields is recommended. Face shields should also be used when dry sawing clay products. 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 and Body	Protective Clothing is not essential. Use gloves and/or protective clothing if abrasion or allergic reactions are experienced.

Section 9. Physical and Chemical Properties

• Appearance	Colored liquid
• Color	Various colors
• Physcial state	Liquid
• pH	6 - 8
• Odor	Earthy odor
• Odor threshold	Not Applicable
• Melting point	> 1000 ºC (>1900 ºF)
• Freezing point	< 0 ºC (<32 ºF)
• Relative density/Specific Gravity	Not Applicable
• Evaporation rate	No data available
• Solubility in water at 100 ºC	None
• Decomposition temperture	Not Applicable
• Viscosity	Not Applicable
• Flashpoint	Not Applicable
• Boiling Point	Not Applicable
• Flammability	Not Applicable
• Vapor Pressure (mm HG)	Not Applicable
• Vapor Density	Not Applicable
• Partition coefficient	Not Applicable
• Auto-ignition temp	Not Applicable

Section 10. Stability and Reactivity

Recactivity	No dangenous reactions are known under normal conditions of use
Chemical Statbility	Stable at standard temperture and pressure. No stabilizers required to maintain chemical stability.
Possibility of Hazardous Reactions and Conditions to Avoid	None known

Imcompatibility / Hazardous decomposition products None known

Section 11. Toxicological Information

Primary Route of Exposure: Skin, Eye Contact, Inhalation and Ingestion

Specific Organ Toxicity – Repeated Exposure
Causes damage to eyes, skin, respiratory system, and gastrointestinal tract through prolonged or repeated exposure

Acute Short-Term Exposure Effects
May cause eye irritation, skin irritation, respiratory tract irritation, and gastrointestinal tract irritation. Inhalation of high concentrations of dry clay dust may cause mechanical irritation and discomfort. Long term exposure may cause chronic effects.

Chronic Long Term Exposure Effects
Silica has been classified by OSHA as human lung carcinogen. Repeated or prolonged exposure of respirable crystalline silica dust may cause lung damage in the form of silicosis.

Effects of silicosis include bronchitis/chronic obstructive pulmonary disorder, increased susceptibility to tuberculosis, sclerodema (a disease affecting skin, blood vessels, joints and skeletal muscles), and possible renal disease. Acute silicosis can be fatal.

Related Symptoms
Symptoms will include shortness of breath, fever, fatigue, loss of appetite, chest pain, dry-non-productive cough.

Medical Conditions Aggravated by Exposure:
Individual;s with pre-existing allergies, eye disorders, skin disorders, respiratory disorders and/or gastrointestinal disorders may have increased susceptibility to the effects of exposure.

OSHA, IARC, and NTP Carcinogen Classifications

Chemicals with Carcinogen Potential	CAS#	OSHA	IARC	NTP
Crystaline Silica – quartz	14808-60-7	YES	YES-1	YES
Copper Compounds	1317-38-0	Yes	Yes -	Yes
Cobalt Compounds	1308-06-1	Yes	Yes 2B	Yes

IARC – International Agency for Research on Cancer
1 – Carcinogenic to humans
2A – Probably carcinogenic to humans
2B – Possibly carcinogenic to humans

OSHA – Occupational Safety & Health Administration
NTP – National Toxicology Program

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Section 12. Ecological Information (non-mandatory)

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

Section 13. Disposal Consideration (non-mandatory)

Personal Protection	Refer to section 8 for proper PPE when disposing of waste material.
Appropriate disposal containers	Standard waste disposal containers - no special requirements.
Appropriate disposal methods	Disposal of this product should comply with the requirements of environmental protection and waste disposal legislation and any regional or local authority requirements.
Physical and chemical properties that may affect disposal	Dry clay dust should be placed in a sealed container or in a manner that reduces or eliminates the release of the product. Moist clay has no special requirements.
Sewage disposal	Do not dispose of into sinks or toilets. Never dispose of this product into a sewer system.
Special precautions for landfills or incineration activities	There are no special precautions for disposal in a landfill. This product is non-combustible and is not suitable for incineration.

Section 14. Transport Information (non-mandatory

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

Section 15. Regulatory Information (non-mandatory)

TSCA - Toxic Substances Control Act - EPA

Quartz and other chemicals are listed in the TSCA Chemical Substance Inventory.

California Prop. 65 WARNING

This product contains a chemical known to the State of California to cause cancer. (Prop. 65 - California Health and Safety Code Section 2549 Et Seq).

SARA/Title III (Emergency Planning & Community Right-to-Know Act

This mixture contains no substances at or above the reporting threshold under section 313, based on available data.

Section 16. Other Information

Definitions

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Service
CAL-OSHA	California Occupational Safety & Health Administration
IARC	International Agency for Research on Cancer
OSHA	Occupational Safety & Health Administration
MSHA	Mine Safety and Health Administration
NIOSH	National Institute of Occupational Safety and Health
NTP	National Toxicology Program
HCS	Hazardous communication standard
OSHA PEL	OSHA permissible exposure limit
STEL	Short-term exposure limit
TLV	Threshold limit value
TWA	Time weighted average

Three types of TLVs for chemical substances as defined by the **ACGIH** are:

TLV-TWA	Time weighted average - average exposure on the basis of an 8h/day, 40h/week work schedule.
TLV-STEL	Short-term exposure limit - spot exposure for a duration of 15 minutes, that cannot be repeated more than 4 times per day, with at least 60 minutes between exposure periods.
TLV-C	Ceiling limit - absolute exposure limit that should not be exceeded at any time.

This SDS is in compliance with The Globally Harmonized System of Classification and Labeling of Chemicals (GHS), and is subject to revsion at any time without notice. Its current revision date is : 3/23/2016

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