SAFETY DATA SHEET
Kaolin Clay

1. PRODUCT INFORMATION AND COMPANY IDENTIFICATION

Product Name:	Kaolin Clay
Recommended Use:	Used in ceramic body and glazes; as a general-purpose filler in adhesives, rubber; refractories; electrode coatings.
Company:	Chemistry Connection 253 Sturgis Rd Conway, AR 72034 Phone: 501-470-9689
Emergency Contact:	Chemtrec: 800-424-9300

2. HAZARD IDENTIFICATION

Health Hazard Warning:
Kaolin clays may contain crystalline quartz, some of which may be respirable, and this element may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use a NIOSH/MSHA approved respirator where TLV for crystalline quartz is exceeded. IARC Monograph Volume 68, 1997 concludes that crystalline quartz causes cancer in humans.

The National Toxicology Program (NTP), in the 11th Annual Report on Carcinogens, 2005, has included respirable crystalline silica on its list of substances that are “reasonably anticipated to be carcinogens”.

NIOSH has identified crystalline silica as a potential occupational carcinogen using the OSHA classification system outlined in 29 CFR 1990.103.

Kaolin clays contain titanium dioxide. NIOSH has identified titanium dioxide as a potential occupational carcinogen.

GHS-US labelling Hazard pictograms (GHS-US) :

GHS07

GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) :
H315 - Causes skin irritation
H320 - Causes eye irritation
H350 - May cause cancer (Inhalation)

Precautionary statements (GHS-US) :
P280 - Wear eye protection, Dust respirator, protective gloves
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 - If eye irritation persists: Get medical advice/attention
P260 - Do not breathe dust

3. COMPOSITION/INFORMATION ON INGREDIENTS

INCI NAME	CAS NO.	CONCENTRATION (%)
Kaolinite	1318-74-7	> 90
Kaolinite Crystalline Silica (Non-combined quartz)	14808-60-7	< 0.5
Titanium Dioxide	13463-67-7	< 3

4. FIRST AID MEASURES

Route of Entry and First Aid

Inhalation: Dust may irritate respiratory system. Move away from contaminated areas and consult a physician if breathing difficulties occur. Individuals with known respiratory disease or difficulties should avoid dust.

Eye Contact: Minor dust quantities may irritate eye tissue. Flush eye(s) thoroughly with water and consult physician if symptoms persist.

Skin Contact: No adverse effects are suspected to exist. Wash contaminated area with water and bath soap (optional).

Ingestion: No negative effects are known to exist for incidental quantities of clay ingested into the stomach.
For suspected large quantities, consult physician for advice.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:
Use extinguishing media that are suitable for the surrounding combustible materials such as product packaging, as the clay product itself is not combustible.

Hazards from Fire:
Under fire conditions, this product may emit toxic and/or irritating fumes.

Precautions for Fire Fighters:
Fire fighters should wear appropriate PPE to prevent exposure to fumes.

6. ACCIDENTAL RELEASE MEASURES

If inadvertently spilled or leaked, reclaim product for intended use.

Increase ventilation and wear sufficient respiratory protection during sweeping / transportation to appropriate container.

If the spilled product needs disposal, consult regulatory authorities. Under RCRA (40 CFR Part 261), kaolin clay is not considered a hazardous waste.

7. HANDLING AND STORAGE

Precautions for Safe Handling:
Use in well ventilated areas. Keep containers sealed when not in use to prevent the buildup of dust in the work environment. Avoid inhalation of dust, as well as skin and eye contact. Maintain proper personal hygiene.

Conditions for Safe Storage:
Store in cool, dry, well-ventilated areas away from moisture. Keep containers tightly closed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Use NIOSH/MSHA approved dust masks if exposure exceeds TLV or PEL limits (see below).

Exposure	Limit
Respirable Crystalline Quartz	ACGIH-TLV: 0.025 mg/m3
	OSHA-PEL: 0.05 mg/m3
	NIOSH: 0.05 mg/m3
Titanium Dioxide	ACGIH-TLV: 10 mg/m3
	OSHA-PEL: 15 mg/m3

Use local exhaust ventilation in areas subject to dust generation.

Use NIOSH/OSHA approved safety goggles when handling the product in dust generating processes.

In wet spraying applications, use NIOSH/OSHA approved dust/mist respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Solid lump or powder form possessing shades of brown, cream white or gray coloration.
pH:	4.0 – 8.0

Odor:	Earth-like especially when containing appreciable moisture content.
Specific Gravity:	2.40 - 2.65
Melting Point:	> 1500o C (Degrees Centigrade)
Boiling Point:	Not available
Flash Point:	N/A
Flammability:	Non-combustible solid
Flammable Limits:	N/A
Auto-Ignition Temperature:	N/A
Vapor Pressure:	N/A
Vapor Density:	N/A
Solubility in Water:	Insoluble

10. STABILITY AND REACTIVITY

Stability: Stable

Hazardous Decomposition: Non-existent

Fire and explosion: Non-flammable

Incompatibility: None known to exist

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information:
This material may contain crystalline silica.

Inhalation:
Harmful: possible danger of serious damage to health from prolonged exposure through inhalation. Immediate effects include irritation to nose, throat, and respiratory system.

Ingestion:
Ingestion of large amounts of the product could irritate the gastric tract.

Skin:
Skin contact may cause dryness of skin which could lead to irritation.

Eye:
Eye contact may cause irritation, and could cause minor abrasions.

Chronic Effects: Potential danger of serious damage to health by prolonged exposure from inhalation. Crystalline Silica can cause silicosis or other lung diseases from prolonged exposure. California Proposition 65: Kaolin clay may contain crystalline quartz, some of which may be respirable.

Carcinogenicity:
The state of California has determined that crystalline silica is a carcinogen to humans.

Toxic Substances Control Act: The known and reported components of kaolin clay are included on the EPA TSCA Inventory.

12. ECOLOGICAL INFORMATION

Ecotoxicity: Not available

Persistence and Degradability: Not available

Bioaccumulative Potential: Not available

Mobility: Not available

13. DISPOSAL CONSIDERATIONS

Dispose of this material should be done in accordance with local and national regulations.

14. TRANSPORT INFORMATION

Kaolin is non-hazardous under DOT regulations.

15. REGULATORY INFORMATION

California Proposition 65: Kaolin clay may contain crystalline quartz, some of which may be respirable.

Toxic Substances Control Act: The known and reported components of kaolin clay are included on the EPA TSCA Inventory.

European Commission Registration, Evaluation, and Authorization of Chemicals (REACH): The known and reported components of kaolin clay are included on the European Chemical Agency (ECHA) pre-registration substance list.

16. OTHER INFORMATION

All statements, technical information and recommendations contained herein are based on tests and data which Chemistry Connection believes to be currently reliable, but this accuracy or completeness thereof is not guaranteed and no warranty of any kind is made with respect thereto. This information is not intended as a license to operate under or a recommendation to practice or infringe any patent of this company or others covering any process, composition of matter or use. Since we shall have no control of the use of the product described here in, we assume no Liability for loss or damage incurred from the proper or improper use of such product.