



# Safety Data Sheet

## Calcined Kaolin (Surface Modified)

Effective 1/2/2019

Expires 1/1/2022

### 1 - IDENTIFICATION, PRODUCT AND COMPANY

**Product name:** BURGESS KE

**REACH status:** Exempted in accordance with Annex V.7

**Other name(s):** Calcined Kaolin (surface modified), Functionalized Anhydrous Aluminum Silicate, Treated China Clay.

**Product Use:** Mineral pigment used as an extender or filler in paper, coatings, paints, adhesives, sealants, rubber and plastic formulations.

**Manufacturer:** Burgess Pigment Company, 525 Beck Boulevard, P.O. Box 349, Sandersville, Georgia 31082 U.S.A.

**Internet:** [www.burgesspigment.com](http://www.burgesspigment.com)

**Email:** [technicalcenter@burgesspigment.com](mailto:technicalcenter@burgesspigment.com)

**Emergency Number:** CHEMTREC in the United States at 800-424-9300 or 703-527-3887 International

### 2 - HAZARD IDENTIFICATION

**Signal Word / Pictogram:** NONE / NONE

**GHS classification:** NONE (This product does not meet the criteria for classification as hazardous as defined in the Regulation EC 1272/2008 and in Directive 67/548/ECC)

**OSHA classification:** Air Contaminant - Kaolin is listed in Table Z-1 of 29 CFR 1910.1000

**WHMIS classification:** Non Controlled - contains less than 0.1% crystalline silica

**Precautionary statements:** Avoid breathing dust, wear approved respiratory protection if exposure is greater than suggested exposure limits (see Section 8)

**California Prop 65 hazards:** NONE

### 3 - COMPOSITION, INFORMATION ON INGREDIENTS

Component(s)	CAS Registry No.	EINECS No.	% (Approx.)	EC Hazard Classification	REACH status
Calcined kaolin	92704-41-1	296-473-8	>99%	Not classified as dangerous	Exempt
Surface treatment	confidential	confidential		Not classified as dangerous	Registered

### 4 - FIRST AID MEASURES

**Eye / Skin Contact:** Direct contact may cause irritation by mechanical abrasion. Hold eyelids apart and flush with a steady stream of water for several minutes. Rinse skin with water.

**Inhalation:** Dust may irritate the nose, throat, and respiratory tract by mechanical abrasion. Coughing, sneezing, and shortness of breath may occur following unprotected exposure in excess of suggested limits. Move person to fresh air.

**Most important symptoms and effects both acute and delayed:** Expected to be non-toxic. No acute and delayed symptoms and effects are observed.

**Indication of any immediate medical attention and special treatment needed:** No specific actions are required

**General advice:** First-aid responders should wear respiratory protection (e.g. dust mask) in dusty areas. If

symptoms persist seek medical attention. Change contaminated clothing.

## 5 - FIRE FIGHTING MEASURES, FIRE OR EXPLOSION HAZARDS

**Extinguishing media:** Noncombustible. Use media appropriate for surrounding materials or packaging.

**Special hazards arising from the substance:** Noncombustible. No hazardous thermal decomposition.

**Advice for firefighters:** Although inert, product can become slippery when exposed to water. Use caution walking around or handling broken product bags when exposed to water.

**Protective measures:** Use protective equipment appropriate for surrounding materials or packaging.

**Flash point:** Noncombustible.

**Flammable limits in air:** Not flammable.

**Autoignition temperature:** Not flammable.

**Explosion data:** Not explosive.

**Unusual fire and explosion hazards:** None known.

**Sensitivity to static discharge:** Not applicable.

## 6 - ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Avoid dust formation. Use approved respirators if dust exposure is greater than recommended limits (refer to Section 8). Water should be used with care as it creates a slipping hazard when mixed with this product.

**Environmental precautions:** This product is generally non-toxic to aquatic systems but may cause high turbidity in storm water. Product is generally not harmful to water treatment systems.

**Clean up methods:** Collect by vacuum and mechanical sweeping, avoid dust generation. Remaining residue can be washed to water treatment or storm water systems.

**Reference for other sections:** See sections 8 and 13

## 7 - HANDLING AND STORAGE

**Precautions for safe handling:** Appropriate personal protection should be used when handling (refer to Section 8). Use care when dispensing to avoid dust generation. Fold and flatten empty bags carefully to reduce dust generation. Wash hands thoroughly after handling. Do not eat, drink or smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas.

**Conditions for safe storage:** Best if kept under dry conditions. Not generally affected by hot or cold storage. Keep unused material in a closed container to avoid contamination and dust exposure. Minimize airborne dust generation and prevent wind dispersal during loading and unloading.

**Specific end use(s):** Please refer to your customer service, sales or distributor representative for detailed information. Product is considered industry grade material.

## 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION, PREVENTIVE MEASURES

**Exposure limit values:** No exposure limits have been published for calcined kaolin products. We recommend using the limits published for Kaolin (CAS# 1332-58-7, EC#310-194-1). Use your local / national occupational exposure limits for kaolin (or 'nuisance dust') if more stringent than the following:

**Engineering controls:** Dust levels in excess of appropriate exposure limits should be reduced by all feasible engineering controls, including (but not limited to) wet suppression, ventilation, process enclosure, and enclosed employee work stations.

Notes- (-A4) This indicates that kaolin is 'Not Classifiable as a Human Carcinogen' by ACGIH.

Exposure Limits Kaolin CAS# 1332-58-7

Value	Limit	Reference
2 mg/m3 (Respirable dust)	TWA (8 hour)	ACGIH TLV-A4*
15 mg/m3 (Total dust)	TWA (8 hour)	OSHA PEL
5 mg/m3 (Respirable dust)	TWA (8 hour)	OSHA PEL
10 mg/m3 (Total dust)	TWA (10 hour)	NIOSH REL
5 mg/m3 (Respirable dust)	TWA (10 hour)	NIOSH REL

Occupational exposure controls

**Eye protection:** Approved safety glasses with side shields.

**Skin / body protection:** Product may have a drying effect on exposed skin. Avoid direct, repeated skin contact. Select protective clothing considering the work environment and exposure risk. Where skin contact is likely use barrier clothing suitable for nuisance dusts.

**Hand protection:** Any type of glove that reduces or eliminates skin contact is acceptable.

**Respiratory protection:** Use a compliant particulate respirator when dust levels exceed or are likely to exceed regulatory limits.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practices. Care should be given to avoid dust generation.

## 9 - PHYSICAL AND CHEMICAL PROPERTIES

**General information, appearance and odor:** Off-white dry powder, soil-like odor.

Important health, safety and environmental information:

**pH in water (20% solids suspension):** 7.0 - 8.0

**Boiling point:** N/A (Solid)

**Melting point:** >1700<sup>o</sup> C

**Flash point:** N/A

**Flammability:** N/A

**Explosive properties:** N/A

**Oxidizing properties:** N/A

**Vapor pressure (mm Hg):** No Vapor

**Specific gravity (H<sub>2</sub>O=1):** 2.6

**Solubility in water:** Insoluble

**Vapor density (Air=1):** No Vapor

## 10 - STABILITY AND REACTIVITY

**Reactivity:** Inert / not reactive

**Chemical stability:** Chemically stable

**Possibility of hazardous reactions:** No hazardous reactions.

**Conditions to avoid:** None known. Stable under normal storage, handling and environmental conditions.

**Incompatible materials:** None known. This product is stable when used as intended by the manufacturer.

**Hazardous decomposition products:** None known. This product is stable in water.

## 11 - TOXICOLOGICAL INFORMATION

**Acute toxicity:** Limited animal studies indicate no hazard, generally regarded as safe by FDA.

**Skin corrosion / irritation:** No data available, generally regarded as safe by FDA.

**Serious eye damage / irritation:** No data available, generally regarded as safe by FDA.

**Respiratory or skin sensitization:** Limited animal studies indicate no hazard, generally regarded as safe by FDA.

**Germ cell mutagenicity:** Limited animal studies indicate no hazard, generally regarded as safe by FDA.

**Carcinogenicity:** Calcined kaolin is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA). The American Conference of Governmental Industrial Hygienists (ACGIH) lists kaolin as- Not Classifiable as a Human Carcinogen: Inadequate data on which to classify the agent in terms of its carcinogenicity in humans and/or animals. This product contains less than 0.1% crystalline silica (quartz) based on testing using NIOSH method 7500.

**Reproductive toxicity:** Limited animal studies indicate no hazard, generally regarded as safe by FDA.

Specific Target Organ Toxicity (STOT)

**Single exposure:** Limited animal studies indicate no hazard, generally regarded as safe by FDA.

**Repeated exposure:** Inhalation- Human studies indicate that chronic (15~20 years) exposure to excessive dust levels may lead to pneumoconiosis, a lung disease. Not all individuals with pneumoconiosis will exhibit symptoms (signs) of the disease. However, pneumoconiosis can be progressive and symptoms can appear at any time, even years after the exposure has ceased. Symptoms of pneumoconiosis may include but are not limited to the following: shorthess of breath; difficulty breathing with or without exertion; coughing; diminished work capacity; diminished chest expansion; reduction of lung volume.

**Aspiration hazard:** Limited animal studies indicate no hazard, generally regarded as safe by FDA.

## 12 - ECOLOGICAL INFORMATION

**Toxicity:** N/A. Animal testing indicates no adverse effects.

**Persistence and degradability:** N/A. This product is made from a naturally occurring, abundant, innocuous mineral.

**Bioaccumulative potential:** No data available. This product is not expected to accumulate in biota.

**Mobility in soil:** Negligible. This product is insoluble in water

**Results of PBT and vPvB assessment:** N/A

**Other adverse effects:** May affect turbidity of water if discharged in large quantities to lakes or streams.

## 13 - DISPOSAL CONSIDERATIONS

**Waste treatment methods:** Improper disposal may create a nuisance dust hazard.

**Waste from residues / unused products:** Whenever possible pickup and reuse uncontaminated product, avoiding dust generation. Product material is not a hazardous waste. Dispose of in accordance to applicable national and local regulations. Place in closed containers to avoid dust generation.

**Packaging:** Dust formations from residues in packaging should be avoided and suitable worker protection assured. Empty packaging materials are suitable for recycling. Place in closed containers to avoid dust generation.

## 14 - TRANSPORTATION INFORMATION

**UN or DOT number and proper name:** N/A. Not a hazardous material as defined under national / international road, rail, sea and air transport regulations

**Transport hazard classes (ADR, IMDG, ICAO / IATA, RID):** Not classified

**Packaging group:** N/A.

**Environmental hazards:** None

**Special precautions for user:** No special precautions

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** N/A.

**Label required:** Use original label including precautionary statement. When disposing of this material in its pure form use a 'Non-Hazardous Waste' label.

## 15 - REGULATORY INFORMATION

**Chemical safety assessment:** Not performed on this product. Adverse effects are not expected when product is used according to guidelines presented in this document.

### U.S. Federal Regulations

FDA: Kaolin (aluminum silicate, china clay, clay) is acceptable for several specific uses. See 21 CFR 73, 82, 175, 176, 177, 178, 186, 310, 335, 346, 347 and 872.

SARA Title III (EPCRTKA) Section 302: This product does not contain any extremely hazardous substances subject to the reporting requirements of 40 CFR Part 355.

SARA Title III (EPCRTKA) Section 311/312: This product is made from kaolin, listed in Table Z-1 of 29 CFR 1910.1000 'Air Contaminants' and is subject to the reporting requirements of 40 CFR Part 370 (threshold quantity of 10,000 lbs)

SARA Title III (EPCRTKA) Section 313: This product does not contain substances subject to the reporting requirements of 40 CFR Part 372.

TSCA: This product or its components are listed in or exempt from the TSCA inventory requirements. This product does not contain substances subject to export notification under Section 12(b) of TSCA.

### North American Regulations

**USA:** Alaska, Arizona, California, Idaho, Indiana, Massachusetts, Michigan, Minnesota, North Carolina, Oregon, Pennsylvania, Rhode Island, Tennessee, Texas, Vermont, and Washington.

**California Prop 65:** No substances requiring notification.

**Canada:** Alberta, British Columbia, Manitoba, New Brunswick, Northwest Territories, Nova Scotia, Nunavut, Ontario, Quebec, Saskatchewan, and Yukon. This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and this MSDS contains all the information required by the Controlled Products Regulations.

**WHIMS classification:** Noncontrolled (tested, contains less than 0.1% crystalline silica).



**Mexico:** See national exposure limits

Several states, provinces and territories specifically list kaolin and regulate dust exposure.

Foreign Regulations

**Hazard symbols:** None

CAS# 92704-41-1 can be found in the following registries: China Inventory, DSL (Canada), ECL (Korea), EINECS (Europe), ENCS (Japan), NZIoC (New Zealand), PICCS (Philippines). AICS (Australia) lists calcined kaolin under the CAS# 66402-68-4. German Water Classification - Annex 1: Non-Hazardous (ID No. 765). Product does not require a hazard warning label in accordance with EC Directive 67/548/EC.

## 16 - OTHER INFORMATION

**Health = 1 \*** : (nuisance dust- fine particulate)

**Flammability = 0** : (non flammable)

**Physical Hazard = 0:** (non reactive)

**Personal Protection Equipment = E \*\*:**

Calcined kaolin is made from a natural mineral which is heated to remove water. Its chemical formula is Al<sub>2</sub>Si<sub>2</sub>O<sub>7</sub> Surface treatment contributes less than 1% of the product weight, imparting physicochemical properties. Hazard Communication or 'Right-to-know' information Hazardous Materials Identification System (HMIS<sup>R</sup> III) Ratings:

Hazard Communication or 'Right-to-know' information-

Hazardous Materials Identification System (HMIS<sup>R</sup> III) Ratings

\*Review and abide by suggested exposure limits. Monitor work area for potential over-exposure.

\*\*Use approved respiratory protection for dusty conditions.

Revised on 10 February 2011: Burgess KE-HO added to product list, updated Foreign Regulations