



# Safety Data Sheet

## Calcined Kaolin (Surface Modified)

Date of First Issue: 2/1/2023

Date of Revision:

### SECTION 1 - IDENTIFICATION, PRODUCT AND COMPANY

**Product name:** BURGESS 5178

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

**Other name(s):** Calcined Kaolin, Anhydrous Aluminum Silicate, China Clay

**Product Use:** Mineral pigment used as an extender or filler in rubber and plastic formulations, wire and cable applications, filled polymers.

**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:** Burgess Pigment Company, +1 478 552 2544, From 12:30 PM (UTC) to 8:30 PM (UTC). Employees only speak English.

### SECTION 2 - HAZARD IDENTIFICATION

**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)

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

**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

### SECTION 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

### SECTION 4 - FIRST AID MEASURES

#### 4.1 Description of First Aid Measures:

**Inhalation:** Move person to fresh air. If exposure symptoms persist, seek medical attention.

**Skin Contact:** Remove contaminated clothing as necessary to avoid direct contact. Wash off with water, using soap if available.

**Eye contact:** Hold eyelids apart and flush with a steady stream of water for several minutes.

**Ingestion:** Clean mouth with water. Drink water as necessary. If symptoms persist, seek medical attention.

**4.2 Most important symptoms and effects, both acute and delayed:** No acute and delayed symptoms and effects are observed. None known.

**4.3 Indication of any immediate medical attention and special treatment needed:** No data available. No specific actions are anticipated.

**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.

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

### 5.1 Extinguishing media:

**Suitable extinguishing media:** Substance is noncombustible. Use media appropriate for surrounding materials or packaging.

### 5.2 Special hazards arising from the substance:

**Hazardous combustion products:** No hazardous combustion products known for substance. Packaging materials are paper or plastic.

**5.3 Advice for firefighters:** The substance is inert and can be slippery when exposed to water. Use caution walking around or handling broken product bags when exposed to water.

**Special Protective measures:** In the event of fire, wear self-contained breathing apparatus. Use protective equipment appropriate for surrounding materials or packaging.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures:** Avoid dust formation. Use approved respirators if dust exposure is greater than suggested limits (see Section 8). Water should be used with care as it creates a slipping hazard when mixed with this product.

**6.2 Environmental precautions:** No special environmental precautions required. This product is generally non-toxic to aquatic systems but may cause high turbidity in storm water.

**6.3 Methods and material for containment and cleaning up:** Sweep up with shovel, avoid dust generation. Keep in suitable, closed containers for disposal.

**6.4 Reference for other sections:** Not applicable.

## SECTION 7 - HANDLING AND STORAGE

**7.1 Precautions for safe handling:** Appropriate personal protection should be used when handling (see 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.

**7.2 Conditions for safe storage, including any incompatibilities:** Best if kept in 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.

**7.3 Specific end use(s):** Please refer to your Customer Service, Sales or Distributor Representative for detailed information. Product is considered industry grade material.

## SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

8.1 Control Parameters: No exposure limits have been published for Calcined Kaolin products. We recommend using the limits published for Kaolin (CAS No. 1332-58-7, EC No. 310-194-1). Use your local / national occupational exposure limits for Kaolin or non-specific/nuisance dusts if more stringent than the following:

Country	Component	CAS No.	Value type (Form of Exposure)	Control Parameters	Basis
Germany	Kaolin	1332-58-7	OELV - 8 hour (TWA) Respirable dust	1.5 mg/m <sup>3</sup>	AGW Limit Value
Belgium, Croatia, Denmark, Finland, Ireland, Italy, Latvia, Portugal, Romania, Spain, Slovakia, UK, USA	Kaolin	1332-58-7	OELV - 8 hour (TWA) Respirable dust	2 mg/m <sup>3</sup>	IE-OELV (8 hour)
Bulgaria	Kaolin	1332-58-7	OELV - 8 hour (TWA) Respirable dust	3 mg/m <sup>3</sup>	IE-OELV (8 hour)
Czech Republic, Estonia, Hungary, Lithuania, Sweden	Kaolin	1332-58-7	OELV - 8 hour (TWA) Respirable dust	5 mg/m <sup>3</sup>	AK Value, NGV Limit Value, IE-OELV (8 hour)

Poland	Kaolin	1332-58-7	OELV - 8 hour (TWA)	6 mg/m <sup>3</sup>	IE-OELV (8 hour)
Bulgaria	Kaolin	1332-58-7	OELV - 8 hour (TWA) Total Inhalable dust	6 mg/m <sup>3</sup>	IE-OELV (8 hour)
Belgium, Estonia, France, Germany, Hungary, Lithuania, Sweden, USA	Kaolin	1332-58-7	OELV - 8 or 10 hour (TWA) Total Inhalable dust	10 mg/m <sup>3</sup>	AGW Limit Value, AK Value, NGV Limit Value, VME, IE-OELV (8 hour), NIOSH REL (10 hour)

Notes- (-A4) This indicates that Kaolin is "Not Classifiable as a Human Carcinogen" by ACGIH. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit value should be used. NO CRYSTALLINE SILICA (QUARTZ) WAS DETECTED IN THIS PRODUCT USING XRD. NO CRYSTALLINE SILICA WAS DETECTED USING NIOSH METHOD 7500 WHILE MONITORING PRODUCTION.

## 8.2 Exposure Controls

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 workstations.

### Personal Protective Equipment

Eye / Face Protection: Approved Safety Glasses with side shields.

Hand Protection: Any type of glove that reduces skin contact with the material is acceptable.

Skin / Body Protection: No special clothing required. Use suitable protection considering the work environment and exposure risk.

Respiratory Protection: Use a compliant particulate respirator when dust levels exceed or are likely to exceed regulatory limits. Equipment should conform to the appropriate standard for protection against airborne particulates, such as NIOSH N95 or EN149:2001.

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

Environmental Exposure Controls: Avoid conditions that would allow wind dispersal.

## SECTION 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

## SECTION 10 - STABILITY AND REACTIVITY

**10.1 Reactivity:** Stable under recommended storage conditions. Inert / not reactive.

**10.2 Chemical stability:** Chemically stable.

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

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

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

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

## SECTION 11 - TOXICOLOGICAL INFORMATION

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:

**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.

**Carcinogenicity:** 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.

**Germ Cell Mutagenicity:** Limited animal studies indicate no hazard.

**Reproductive Toxicity:** Limited animal studies indicate no hazard.

### **Specific Target Organ Toxicity (STOT):**

**Single Exposure:** Limited animal studies indicate no hazard.

**Repeated Exposure:** Inhalation - Human studies indicate that chronic exposure to high levels of Kaolin dust that contains between 1% and 3% crystalline silica 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: shortness 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.

**11.2 Information on Other Hazards:** No data available.

## SECTION 12 - ECOLOGICAL INFORMATION

**12.1 Toxicity: Kaolin:** Toxicity to Fish, no data available. Toxicity to daphnia and other aquatic invertebrates, no data available. Toxicity to algae / aquatic plants, no data available. Toxicity to microorganisms, no data available.

**12.2 Persistence and degradability:** No data available. Product is made from a naturally occurring, abundant, innocuous mineral.

**12.3 Bioaccumulative potential: Kaolin:** Partition coefficient: n-octanol/water (POW) < 1 (estimated). This product is not expected to accumulate in biota.

**12.4 Mobility in soil:** No data available. This product is insoluble in water.

**12.5 Results of PBT and vPvB assessment:** This product contains no components considered to be either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**12.6 Endocrine disrupting properties:** This product does not contain components considered to have endocrine disrupting properties.

**12.7 Other adverse effects:** Additional ecological information: Kaolin is a common, abundant mineral found on the earth's surface causing no known adverse effects. Not biodegradable.

## SECTION 13 - DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods:

**Product:** Whenever possible pick up and reuse uncontaminated product, avoiding dust generation. Product is not a hazardous waste. Dispose of product according to applicable national and local regulations. Place in closed containers to avoid dust generation.

**Packaging:** Empty packaging materials are suitable for recycling. Carefully collect and slowly compact packaging to avoid dust generation. Place in closed containers to avoid dust generation. Provide suitable worker protection if dusty conditions persist.

## SECTION 14 - TRANSPORTATION INFORMATION

### 14.1 UN Number or ID Number

ADR/RID	ADN	IMDG	IATA
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Not regulated as a dangerous good	Not regulated as a dangerous good	Not regulated as a dangerous good	Not regulated as a dangerous good
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14.2 UN Proper Shipping Name

ADR/RID	ADN	IMDG	IATA
Not regulated as a dangerous good	Not regulated as a dangerous good	Not regulated as a dangerous good	Not regulated as a dangerous good

14.3 Transport Hazard Class(es)

ADR/RID	ADN	IMDG	IATA
Not regulated as a dangerous good	Not regulated as a dangerous good	Not regulated as a dangerous good	Not regulated as a dangerous good

14.4 Packing Group

ADR/RID	ADN	IMDG	IATA
Not regulated as a dangerous good	Not regulated as a dangerous good	Not regulated as a dangerous good	Not regulated as a dangerous good

14.5 Environmental Hazards: Not regulated as a dangerous good.

14.6 Special Precautions for User: Not Applicable.

14.7 Maritime transport in bulk according to IMO Instruments: Not Applicable for the product as supplied.

## SECTION 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:** Non controlled (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. 7926). Product does not require a hazard warning label in accordance with EC Directive 67/548/EC.

## SECTION 16 - OTHER INFORMATION

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

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

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

**Personal Protective Equipment = E \*\***:

**Revised on 01 February 2023** : Minor format changes. Conforms to ANSI Z400.1/Z129.1-2010 Standard, OSHA HCS (2012)

Calcined kaolin is made from a natural mineral which is heated to remove water. Its chemical formula is  $Al_2Si_2O_7$ . Surface treatment contributes less than 1% of the product weight, imparting physicochemical properties.

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

\* Possible chronic hazard. Review and abide by suggested dust exposure limits. Monitor work area for potential over-exposure to dust.

\*\* Use safety glasses, gloves and appropriate respiratory protection for dusty conditions.