

**Amper**  
1500 E. 4th Str  
Austin, TX 78702

**MATERIAL SAFETY DATA SHEET**

Date Of Revision  
14 November 2008

**HYDROUS KAOLIN CLAY**

**1 - PRODUCT AND COMPANY IDENTIFICATION**

Products: **CLAYBORD - CLAY MIX**

Manufacturer: **AMPERSAND**  
Prepared by:

Emergency phone: **800-822-1939**

Internet: **www.ampersandart.com** Email: **bords@ampersandart.com**

Product use: Mineral pigment extender (or filler) used in paper coatings, paints, rubber and plastic formulations

**2 - HAZARDS IDENTIFICATION**

EC hazard classification: This product is not classified as dangerous according to Directive 1999/45/EC

Hazard symbols: None

Most important adverse human health effect: Nuisance dust

**3 - COMPOSITION/INFORMATION ON INGREDIENTS**

Component(s)	CAS Registry No.	SINCS No.	% (Approx.)	EC Hazard Classification
Kaolin	1332-58-7	310-194-1	100	Not classified as dangerous

**4 - FIRST AID MEASURES**

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

**Skin contact:** Direct contact may cause irritation by mechanical abrasion. Wash skin with soap and water.

**Inhalation:** Dusts may irritate the nose, throat, and respiratory tract by mechanical abrasion. Coughing, sneezing, and shortness of breath may occur following exposures in excess of appropriate limits. Remove person to fresh air.

**Ingestion:** Expected to be non-toxic. Ingestion of large amounts may cause gastrointestinal irritation and blockage. Rinse mouth out with water. Do not induce vomiting.

**General advice:** If symptoms persist seek medical attention. Change contaminated clothing.

**5 - FIRE FIGHTING MEASURES**

**Extinguishing media:** Non-combustible. Use media appropriate for surrounding materials or packaging.

**Flash point:** Non-combustible.

**Inappropriate extinguishing media:** None

**Flammable limits in air:** Not flammable

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

**Autoignition temperature:** Not flammable

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

**Explosion data:** Non-explosive

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



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**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. 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.

**7 - HANDLING AND STORAGE**

**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.

**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.

**Product use:** Mineral pigment extender (or filler) used in paper coatings, paints, rubber and plastic formulations.

**8 - EXPOSURE CONTROLS/PERSONAL PROTECTION**

Use your local / national occupational exposure limits for kaolin (or "nuisance dust") if more stringent than the following:

Exposure Limits:	Value	Limit	Reference
Kaolin CAS# 1332-59-7	2 mg/m <sup>3</sup> (Respirable dust)	TWA (8 hour)	ACGIH TLV-A4*
	15 mg/m <sup>3</sup> (Total dust)	TWA (8 hour)	OSHA PEL
	5 mg/m <sup>3</sup> (Respirable dust)	TWA (8 hour)	OSHA PEL
	10 mg/m <sup>3</sup> (Total dust)	TWA (10 hour)	NIOSH REL
	5 mg/m <sup>3</sup> (Respirable dust)	TWA (10 hour)	NIOSH REL

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

**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.

**Occupational exposure controls-**

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

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

**Hand protection:** Any type of glove that reduces skin contact with the material 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.



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### 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): 3.5- 7.5  
Boiling point: N/A (Solid) Melting point: >1700° 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

Conditions to avoid: This product is stable under normal storage, handling and environmental conditions.

Materials to avoid: 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: No data available. No hazards expected.

Irritant / corrosive / sensitization effects: No data available. No hazards expected.

Effects after repeated or prolonged exposure (subacute, subchronic, chronic): No data available.

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.

### 12 - ECOLOGICAL INFORMATION

Ecotoxicity: No data available. No adverse ecological effects are expected. May affect turbidity of water if discharged in large quantities to lakes or streams.

Mobility: This product is insoluble in water.

Persistence and degradability: 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.

### 13 - DISPOSAL CONSIDERATIONS

Whenever possible pickup and reuse uncontaminated product, avoiding dust generation. Empty packaging materials are suitable for recycling.

Product material is not hazardous as a waste. Dispose waste product and packaging materials according to applicable national and local regulations. Improper disposal may create a nuisance dust hazard. Dispose waste product and packaging materials in closed containers to avoid dusting.



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**14 - TRANSPORTATION INFORMATION**

UN or DOT Hazard Classification: Not a hazardous material as defined under national / international road, rail, sea and air transport regulations.

Placard Required: None

Label Required: Use original label including all warnings. When disposing of this material in its pure form use a "Non-Hazardous Waste" label.

**15 - REGULATORY INFORMATION**

**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**

Several states, provinces and territories specifically list kaolin and regulate dust exposure. USA: Alaska, Arizona, California, Idaho, Indiana, Massachusetts, Michigan, Minnesota, North Carolina, Oregon, Pennsylvania, Rhode Island, Tennessee, Texas, Vermont, and Washington. Canada: Alberta, British Columbia, Manitoba, New Brunswick, Northwest Territories, Nova Scotia, Nunavut, Ontario, Quebec, Saskatchewan, and Yukon. WHIMS classification: N/A (contains less than 0.1% crystalline silica). Mexico: see national exposure limits. For the most current regulatory information please contact the appropriate agencies in the state, province or territory where the product is used.

**Foreign Regulations**

CAS# 1332-58-7 can be found in the following registries: AICS (Australia), China Inventory, DSL (Canada), ECL (Korea), EINECS (Europe), ENCS (Japan), PICCS (Philippines), SWISS (Swiss), ERMA IIC (New Zealand). German Water Classification - Annex 1: Non-Hazardous (LD No. 765). Product does not require a hazard warning label in accordance with EC Directive 67/548/EC.

Hazard symbols: None

**16 - OTHER INFORMATION**

Kaolin is a naturally occurring mineral. Its chemical formula is  $Al_2Si_2H_5O_7$ .

Hazard Communication or "Right-to-know" information - Hazardous Materials Identification System (HMIS III) Ratings:

Health = 0 *	Nuisance dust
Flammability = 0	Non-flammable
Physical Hazard = 0	Non-reactive
Personal Protection Equipment = E **	

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

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

Revised on 14 November 2008: Various changes for EU compliance.