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8 pages



# MATERIAL SAFETY DATA SHEET

A FAMILY OF SOLUTIONS

## SB-36

REVISION NUMBER: 1.5

REVISION DATE: 24/Aug/2004

[REDACTED]

**PRODUCT NAME:** SB-36

**MANUFACTURER:** J.M. Huber Corporation  
1000 Parkwood Circle Suite 1000  
Atlanta, GA 30339  
Tel: 678-247-7300

**EMERGENCY TELEPHONE:** CHEMTREC: 800-424-9300 or 703-627-3887 International

**INTERNET:** [www.hubermaterials.com](http://www.hubermaterials.com)

[REDACTED]

**EMERGENCY OVERVIEW:** This is a non-combustible, odorless white powder.

**POTENTIAL HEALTH EFFECTS:**

**EYE CONTACT:** Dust may cause mechanical irritation to eyes.

**INHALATION:** Inhalation of dust may cause respiratory tract irritation.

**CARCINOGENICITY:** This product is not listed as a carcinogen by the IARC, NTP or OSHA.

**POTENTIAL ENVIRONMENTAL EFFECTS:** Not considered to be harmful to aquatic life.

[REDACTED]

COMPONENTS	CAS NUMBER	WEIGHT %
Aluminum Trihydrate	21645-51-2	100

[REDACTED]

**EYE CONTACT:** Hold eyelids apart and flush eyes with a steady, gentle stream of water for several minutes.

**INHALATION:** Remove person to fresh air.

**GENERAL ADVICE:** In case of doubt or when symptoms persist, seek medical attention.

[REDACTED]

**EXTINGUISHING MEDIA:** Non-combustible. All extinguishing media can be used. Use suitable media appropriate for the surrounding fire.

**UNSAFE EXTINGUISHING MEDIA:** None.

**SPECIAL EXPOSURE HAZARDS:** None.

**SPECIAL PROTECTIVE EQUIPMENT:** Firefighters should wear protective clothing and use equipment that is suitable for the materials involved in the surrounding fire.

### PERSONAL PRECAUTIONS

**PERSONAL PRECAUTIONS:** Avoid dust formation. In case of exposure to high levels of airborne dust, wear a personal respirator in compliance with national legislation.

**ENVIRONMENTAL PRECAUTIONS:** This product does not present any particular risk to the environment. Refer to applicable national, state and local regulations prior to washing in drain.

**CLEAN UP METHODS:** Collect mechanically and or by flushing with water. Avoid dry sweeping. Use water spraying or ventilated vacuum system to prevent dust formation.

### HANDLING AND STORAGE

**HANDLING:** Avoid dust formation. Provide appropriate exhaust ventilation in places where dust is formed. In case of insufficient ventilation, wear suitable respiratory equipment.

**STORAGE:** Store in a dry area. Keep containers closed and protect from physical damage.

### EXPOSURE LIMITS / PERSONAL PROTECTION

#### EXPOSURE LIMIT VALUES:

COMPONENTS	OSHA:	ACGIH:
Aluminum Trihydrate	15 mg/m <sup>3</sup> Total Dust 5 mg/m <sup>3</sup> Respirable Dust	10 mg/m <sup>3</sup> Total Dust

**ENGINEERING CONTROLS:** Use mechanical ventilation (dilution and local exhaust) to control exposure.

**EYE PROTECTION:** Safety glasses with side shields.

**SKIN AND BODY PROTECTION:** Use suitable protective clothing, gloves and footwear, selected with regard for use conditions and exposure potential.

**HAND PROTECTION:** Impervious gloves chemical resistant.

**RESPIRATORY PROTECTION:** In case of exposure to high levels of airborne dust, wear a respirator in compliance with national legislation.

**HYGIENE MEASURES:** Handle in accordance with good industrial hygiene and safety practice.

**ENVIRONMENTAL EXPOSURE:** This product does not present any particular risk for the environment. Refer to applicable national, state and local regulations prior to washing in drain.

### PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE:** White Powder

**ODOUR:** Odourless.

**pH:** 8.4-10.2, 5% water suspension

**FLASH POINT:** Non-combustible.

**DENSITY:** 2.4 g/cm<sup>3</sup>, 20° C**WATER SOLUBILITY:** Insoluble**DECOMPOSITION TEMPERATURE:** 200° C**STABILITY AND REACTIVITY INFORMATION****STABILITY:** Stable under ambient temperature (21°C) and pressure (760 mm Hg).**CONDITIONS TO AVOID:** None**MATERIALS TO AVOID:** Strong Acids Oxidizers**HAZARDOUS DECOMPOSITION PRODUCTS:** None**TOXICOLOGICAL INFORMATION****ACUTE TOXICITY:** LD50 Oral (rat) > 5000 mg/kg**EYE IRRITATION:** Slightly Irritating, not classified.**SKIN IRRITATION:** Non-Irritating.**SENSITIZATION:** Does not cause sensitization.**CHRONIC TOXICITY:** No evidence of mutagenic, reproductive or carcinogenic effects.**ECOTOXICITY INFORMATION****ECOTOXICITY:** EC50 (Fish) > 10000 mg/l EC50 (Daphnia) > 10000 mg/l)**MOBILITY:** Inert material.**PERSISTENCE / DEGRABILITY:** Non-degradable**BIOACUMULATIVE POTENTIAL:** Inert Material**OTHER ADVERSE EFFECTS:** None known.**DISPOSAL CONSIDERATIONS****DISPOSAL:** Dispose in accordance with local, state and national regulations.**TRANSPORT INFORMATION****DOT:** Not Regulated**REGULATORY INFORMATION****NFPA:****HEALTH:** 1**FLAMMABILITY:** 0**REACTIVITY:** 0**HMIS:****HEALTH:** 1**FLAMMABILITY:** 0**PHYSICAL HAZARD:** 0**HARMONIZED TARIFF CODE:** 2818 3000**AUSTRALIA AICS:** Aluminum trihydrate 21645-51-2

**CANADA DSL:** Aluminum trihydrate 21645-51-2

**CHINA IECS:** Aluminum trihydrate 21645-51-2

**EUROPE EINECS:** Aluminum trihydrate 244-492-7

**JAPAN ENCS:** Aluminum trihydrate 1-17

**KOREA KECI:** Aluminum trihydrate KE-00980

**PHILIPPINES PICCS:** Aluminum trihydrate 21645-51-2

**US TSCA:** Aluminum trihydrate 21645-51-2

**SARA 311 / 312 HAZARD:** None

**SARA 313 SUBSTANCES:** None

**CERCLA RQ:** None

**CLEAN AIR ACT:** The components of this product are not regulated under any of the following sections of the Clean Air Act: Section 111 Volatile Organic Compounds, Section 112 Hazardous Air Pollutants, Section 112 Statutory Air Pollutants, Section 112 High-Risk Pollutants, Section 112(r) Accidental Release Prevention Substances or Section 602 Ozone Depleting Substance. As a powder product, it would be regulated under Section 109 Criteria Pollutants particulates.

**PROPOSITION 65:** This product contains no chemicals at levels known to the State of California to cause cancer or reproductive hazards.

**CONEG:** We certify that heavy metals defined as lead, mercury, cadmium and hexavalent chromium are not intentionally introduced to this product and with respect to lead, mercury, cadmium and hexavalent chromium, the incidental level of these four metals is less than 100 ppm.

**FDA:** 176.210, 177.1200, 177.2600, 182.90 May be used in accordance with the following 21 CFR Sections:



The information contained in this Safety Data Sheet to the best of J.M. Huber's knowledge and belief as of the date indicated is believed to be accurate and reliable. However, no representation, warranty or guarantee is implied or expressed regarding the accuracy, reliability or completeness of this information or the use of the product. Nothing contained herein should be construed as a recommendation to use this product in conflict with National or local regulations or existing patents covering any material or its use.

**END OF MATERIAL SAFETY DATA SHEET**

CUSTOMER: TRINITY CERAMIC SUPPLY, INC.  
DALLAS, TX



## KENTUCKY-TENNESSEE CLAY COMPANY

Mayfield, KY Plant  
Gleason, TN Plant  
Sledge, MS Plant

### MATERIAL SAFETY DATA SHEET

To comply with OSHA's 29 CFR 1910.1200 and Bill No. 70 WHMIS Hazard Communication Standards.

#### SECTION I. IDENTITY OF PRODUCT AND PRODUCER

DATE PREPARED: Feb. 10, 2003

DATE MAILED: May 1, 2003

TRADE NAME:

CHEMICAL NAME: <sup>TENN #1 SGP</sup> BALL CLAY, Hydrous Aluminum Silicate

CAS NUMBER 1332-58-7

#### PRODUCER'S NAME AND ADDRESS (HQ):

Kentucky-Tennessee Clay Company  
5080 State Route 45 South  
Mayfield, KY 42066

#### TELEPHONE NUMBERS:

270-247-3061  
270-247-0293 FAX

#### EMERGENCY CONTACT:

CHEMTREC: (800) 424-9300\*

\*To be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals.

#### SECTION II. HAZARDOUS INGREDIENTS

Free Silica (Quartz)*	Typically 10 - 30%	CAS NO. 14808-60-7
Titanium Dioxide	Typically Less Than 2.6%	CAS NO. 13463-67-7

\*Ball clays reported on this Company's Material Safety Data Sheet, Form 0302b, contain crystalline silica, as quartz up to 30% by dry weight depending on product type. Some of this silica is not fine enough to normally be considered respirable.

#### SECTION III. PHYSICAL DATA

FUSION RANGE:	1569 - 1785° C.	SPECIFIC GRAVITY:	2.4 - 2.65
SOLUBILITY IN WATER:	Negligible	PERCENT VOLATILE:	Below 100° C. None
VAPOR PRESSURE:	Not Applicable	pH:	3.5 - 7.5
ODOR AND APPEARANCE:	Earthy odor when wet, raw color light gray to brown		

SECTION IV. FIRE AND EXPLOSION DATA: Non-flammable

#### SECTION V. HEALTH HAZARD DATA

OSHA PEL: Respirable Crystalline Quartz (TWA-TLV) = 0.1 mg/m<sup>3</sup>  
ACGIH TLV: Respirable Crystalline Quartz (TWA-TLV) = 0.1 mg/m<sup>3</sup>  
Crystobalite & Tridymite (See STABILITY) (TWA-TLV) = 0.05 mg/m<sup>3</sup>  
NIOSH TWA: Respirable Crystalline Quartz = 0.05 mg/m<sup>3</sup>

ROUTE OF ENTRY: Inhalation

HEALTH HAZARDS: **WARNING:** This clay product contains crystalline silica which may cause delayed respiratory disease (silicosis) if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for crystalline silica may be exceeded.

IARC MONOGRAPH VOLUME 68, 1997 concludes that there is sufficient evidence that inhaled crystalline silica causes cancer in humans. IARC classification: Group 1.

The NTP, in the Sixth Annual Report on Carcinogens, 1991, has added crystalline silica to its list of substances that are "reasonably anticipated to be carcinogens".

**WARNING:** This product contains Titanium Dioxide (TiO<sub>2</sub>). Inhalation may cause damage to respiratory system. Identified as a potential carcinogen by NIOSH. OSHA TWA for TiO<sub>2</sub> is 15 mg/m<sup>3</sup>.

FIRST AID: EYES: Flush thoroughly with water for 10 to 15 minutes. Contact physician if Irritation persists.

**BREATHING:** If breathing difficulty develops, remove to fresh air. If breathing difficulty persists, contact physician.

**WARNING:** IARC Monograph Volume 69, 1997, concludes that 2,3,7,8-TCDD (a dioxin) is carcinogenic to humans.

Form 0302b

**SECTION VI. REACTIVITY DATA**

**STABILITY:** Ball clay is stable under ordinary conditions. When exposed to high temperatures, free quartz can change crystal structure to form tridymite (above 870° C.) or cristobalite (above 1470° C.) which have greater health hazards than quartz.

**INCOMPATIBILITY:** (Materials to avoid) - None

**HAZARDOUS POLYMERIZATION:** Will not occur

**SECTION VII. SPILL, LEAK, AND DISPOSAL INFORMATION**

**ACTION TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Clean up and collect, minimizing dust. Do not exceed recommended PEL or TLV. Avoid Breathing Dust. Wear an approved respirator. **CAUTION:** When water is applied, product becomes slippery.

**WASTE DISPOSAL METHOD:** Follow federal, state and local regulations for solid waste disposal. Under RCRA (40 CFR Part 261) ball clay is not a hazardous waste.

**COMMUNITY RIGHT TO KNOW:** California's Proposition 65 lists crystalline silica as a carcinogen, and 2,3,7,8-TCDD (dioxin) as known to cause cancer and reproductive toxicity.

**OTHER PRECAUTIONS:** Product becomes slippery when wet. Follow good personal hygiene practices. Wash hands prior to eating.

**SECTION VIII. SPECIAL PROTECTION INFORMATION**

**VENTILATION:** Recommended method.

**RESPIRATORY PROTECTION:** If dust concentrations exceed recommended PEL or TLV for short time durations, use NIOSH/MSHA approved dust respirators. If spraying wet coatings, use NIOSH/MSHA dust/mist respirators.

**EYE PROTECTION:** Wear tight fitting goggles if high dust concentrations exist. NIOSH recommends that contact lenses not be worn when working with crystalline silica.

**SKIN PROTECTION:** Wear gloves appropriately to the activity.

- OTHER:**
1. Dust exposure levels in excess of appropriate PEL or TLV should be reduced by feasible engineering and/or administrative controls.
  2. It is recommended that the employer obtain a copy of the ASTM E 1132 information package, "Standard Practice for Health Requirements Relating to Occupational Exposure to Quartz Dust".
  3. Government regulations require that exposed personnel receive appropriate training in safe work habits when working with crystalline silica where the potential exists for exceeding the PEL or TLV.

**SECTION IX. SPECIAL PRECAUTIONS**

Minimize dust generation and exposure. Do not breathe dust. TWA should not exceed TLV or PEL. Utilize gloves.

ACGIH recommends periodic physical examinations for those employees who are exposed to respirable crystalline silica levels greater than 50% of the TLV or PEL.

Trace amounts of dioxin congeners, including TCDD, have been detected in parts per trillion (ppt). These trace amounts are not believed to be a health risk, but Special Protections and Special Precautions noted above are advised. Methods of transmission may include inhalation, ingestion, or dermal absorption.

Ball clay is not hazardous under DOT regulations.

Manufacturers who crush and grind ceramic bodies fired to high temperatures should recognize possible presence of tridymite and/or cristobalite which have greater health hazards than quartz.

Data, information and recommendations recorded herein are believed to be accurate. Kentucky-Tennessee Clay Company makes no warranty, either expressed or implied, with respect thereto and disclaims all liability from reliance thereon. Standards may vary in different non-U.S. jurisdictions. Follow applicable guidelines.