




MSDS Number: **K0870** \* \* \* \* \* *Effective Date: 01/16/06* \* \* \* \* \* *Supersedes: 08/10/04*

	<b>From: Mallinckrodt Baker, Inc.</b> 222 Red School Lane Phillipsburg, NJ 08865			24 Hour Emergency Telephone: 908-859-2151 CHEMTREC: 1-800-424-9300
	NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.			National Response in Canada CANUTEC: 613-896-6666 Outside U.S. and Canada Chemtrec: 703-527-3887

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

## KAOLIN

### 1. Product Identification

**Synonyms:** Kaolin Powder USP; clay; hydrated aluminum silicate; China Clay; kaolinite  
**CAS No.:** 1332-58-7  
**Molecular Weight:** Not applicable.  
**Chemical Formula:** Al<sub>2</sub>Si<sub>2</sub>O<sub>5</sub>(OH)<sub>4</sub>  
**Product Codes:**  
 J.T. Baker: 2242  
 Mallinckrodt: 5471, 5645

### 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Kaolin	1332-58-7	98 - 100%	Yes

### 3. Hazards Identification

#### Emergency Overview

**CAUTION! NUISANCE DUST. MAY CAUSE IRRITATION TO RESPIRATORY AND G.I. TRACT.**

**SAF-T-DATA<sup>(tm)</sup>** Ratings (Provided here for your convenience)

Health Rating: 1 - Slight  
 Flammability Rating: 0 - None  
 Reactivity Rating: 0 - None  
 Contact Rating: 1 - Slight  
 Lab Protective Equip: GOGGLES; LAB COAT; PROPER GLOVES  
 Storage Color Code: Green (General Storage)

#### Potential Health Effects

##### Inhalation:

Inhalation of dust may cause irritation to the respiratory tract.

##### Ingestion:

Extremely large oral dosages may produce gastrointestinal disturbances.

##### Skin Contact:

No adverse effects expected.

##### Eye Contact:

No adverse effects expected but dust may cause mechanical irritation.

##### Chronic Exposure:

May produce chronic pulmonary fibrosis and stomach granuloma.

##### Aggravation of Pre-existing Conditions:

No information found.

### 4. First Aid Measures

#### Inhalation:

Remove to fresh air. Get medical attention for any breathing difficulty.

#### Ingestion:

Not expected to require first aid measures.

**Skin Contact:**

Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.

**Eye Contact:**

Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

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## 5. Fire Fighting Measures

**Fire:**

Not considered to be a fire hazard.

**Explosion:**

Not considered to be an explosion hazard.

**Fire Extinguishing Media:**

Use any means suitable for extinguishing surrounding fire.

**Special Information:**

Use protective clothing and breathing equipment appropriate for the surrounding fire.

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## 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

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## 7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

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## 8. Exposure Controls/Personal Protection

**Airborne Exposure Limits:**

-OSHA Permissible Exposure Limit (PEL):

15 mg/m<sup>3</sup> (TWA) total particulate;

5 mg/m<sup>3</sup> (TWA) respirable fraction.

-ACGIH Threshold Limit Value (TLV):

2 mg/m<sup>3</sup> (TWA) for respirable dust, A4 Not classifiable as a human carcinogen.

-NIOSH Recommended Exposure Limits (REL):

10 mg/m<sup>3</sup> (TWA) total particulate;

5 mg/m<sup>3</sup> (TWA) respirable fraction.

**Ventilation System:**

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

**Personal Respirators (NIOSH Approved):**

If the exposure limit is exceeded and engineering controls are not feasible, a half facepiece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

**Skin Protection:**

Wear protective gloves and clean body-covering clothing.

**Eye Protection:**

Safety glasses. Maintain eye wash fountain and quick-drench facilities in work area.

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## 9. Physical and Chemical Properties

**Appearance:**

Fine white to yellow-white powder.

**Odor:**

Odorless.

**Solubility:**

Insoluble in water.

**Density:**

1.8 - 2.6

**pH:**

No information found.

**% Volatiles by volume @ 21C (70F):**

0

**Boiling Point:**

Not applicable.

**Melting Point:**

No information found.

**Vapor Density (Air=1):**

No information found.

**Vapor Pressure (mm Hg):**

No information found.

**Evaporation Rate (BuAc=1):**

No information found.

## 10. Stability and Reactivity

**Stability:**

Stable under ordinary conditions of use and storage.

**Hazardous Decomposition Products:**

No hazardous decomposition products.

**Hazardous Polymerization:**

Will not occur.

**Incompatibilities:**

No incompatibility data found.

**Conditions to Avoid:**

No information found.

## 11. Toxicological Information

Investigated as a reproductive effector.

-----\Cancer Lists\-----			
Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Kaolin (1332-58-7)	No	No	None

## 12. Ecological Information

**Environmental Fate:**

No information found.

**Environmental Toxicity:**

No information found.

## 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## 14. Transport Information

Not regulated.

## 15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----				
Ingredient	TSCA	EC	Japan	Australia
Kaolin (1332-58-7)	Yes	No	Yes	Yes

-----\Chemical Inventory Status - Part 2\-----				
Ingredient	Korea	--Canada--		
		DSL	NDSL	Phil.
Kaolin (1332-58-7)	Yes	No	Yes	Yes

-----\Federal, State & International Regulations - Part 1\-----				
Ingredient	-SARA 302-		-SARA 313-	
	RQ	TPQ	List	Chemical Catg.
Kaolin (1332-58-7)	No	No	No	No

-----\Federal, State & International Regulations - Part 2\-----			
Ingredient	CERCLA	-RCRA-	-TSCA-
		261.33	8 (d)
Kaolin (1332-58-7)	No	No	No

Chemical Weapons Convention: No    TSCA 12(b): No    CDTA: No

SARA 311/312: Acute: Yes      Chronic: No      Fire: No      Pressure: No  
Reactivity: No                      (Pure / Solid)

**Australian Hazchem Code:** None allocated.

**Poison Schedule:** None allocated.

**WHMIS:**

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

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## 16. Other Information

**NFPA Ratings:** Health: 0 Flammability: 0 Reactivity: 0

**Label Hazard Warning:**

CAUTION! NUISANCE DUST. MAY CAUSE IRRITATION TO RESPIRATORY AND G.I. TRACT.

**Label Precautions:**

Use with adequate ventilation.

Keep container closed.

Avoid breathing dust.

Avoid contact with eyes, skin and clothing.

Wash thoroughly after handling.

**Label First Aid:**

If inhaled, remove to fresh air. Get medical attention for any breathing difficulty. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.

**Product Use:**

Laboratory Reagent.

**Revision Information:**

MSDS Section(s) changed since last revision of document include: 3.

**Disclaimer:**

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