



Micromeritics Instrument Corp. and Micromeritics Analytical Services
 www.micromeritics.com www.particletesting.com
 Surface Area - Porosity - Density - Particle Size, Shape & Count - Catalytic Activity - Surface Energy - Analytical Services

Cover Sheet



INSTRUMENT CORPORATION
 ONE MICROMERITICS DR.
 NORCROSS, GA 30093-1877 U.S.A.

MSDS
Ref. Mat. Kaolinite
SA~15.9 m²/g

| | | | | | | | |
|-----|----------------------|----------|----------|-----|----------|----------|---------------|
| | | | | | | DWN BY | J. Pittman |
| | | | | | | ENGR | J. Mocny |
| | | | | | | ENGR SIG | P. Hendrix |
| | | | | | | HR SIG | J. Mocny |
| A | Revision | JP | 07/29/04 | | 040293 | Q.A. | A. Dovin |
| - | Formal Release | C. Bills | 4/3/00 | | 000120 | E.S. | K. Massengill |
| REV | REVISION DESCRIPTION | BY | DATE | CHK | REL. NO. | | |

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| SIZE | NUMBER | PAGE |
| A | 004/16819/00MSDS | X of 1 |

Micromeritics Material Safety Data Sheet

Title : Ref. Mat. Kaolinite SA~15.9 m²/g
Date of Preparation : 07/29/04

MSDS No. : 004/16819/00MSDS
Revision : A

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Ref. Mat. Kaolinite SA~15.9 m²/g

Chemical Formula: AL₂O₃ 2SiO₂ 2H₂O

CAS Number: 1332-58-7

Other Designations: Hydrous Kaolin

General Use:

Supplier: Micromeritics Instrument Corp.
1 Micromeritics Dr.
Norcross, GA 30093-1877 USA

Contact: Human Resources
Phone: (770) 662-3620
Fax: (770) 662-3696

Manufacturer: Englehard Corporation, Paper Pigments & Additives
101 Wood Avenue, Iselin, NJ 08830-0770
Emergency Phone: 800-424-9300
Phone: 732-205-5502

Section 2 - Composition / Information on Ingredients

| Ingredient Name | CAS Number | % wt |
|-----------------|------------|------|
| Kaolin | 1332-58-7 | ~100 |

Kaolin is classified as a nuisance dust by the American Conference of Governmental Industrial Hygienists (ACGIH). Unless otherwise noted, all values are reported as 8-hour Time-Weighted Averages (TWAs) and total dust (particulates only). All ACGIH TLVs refer to the 1999 Standards. All OSHA PELs refer to 29 CFR Part 1910 Air Contaminants: Final Rule, January 19, 1989.

Ingredient Notes: *Naturally occurring chemical substance per TSCA, 40 CFR 710.4(b).

NOTE: See Section 8 for Exposure Limits and Section 13 for Toxicological Information.

Trace Impurities:

| Ingredient | OSHA PEL | | ACGIH TLV | | NIOSH REL | | NIOSH |
|------------|-------------------------------------|-------------|--|----------------|-------------|----------------|----------------|
| | TWA | STEL | TWA | STEL | TWA | STEL | H IDLH |
| Kaolin | 10mg/m ³ Total Dust | none estab. | 2 mg/m ³ Respir. fraction | none estab. | none estab. | none estab. | none estab. |
| | 5 mg/m ³ Respir. dust | | | | | | |
| | | | | | | | |

Section 3 - Hazards Identification

☆☆☆☆☆ **Emergency Overview** ☆☆☆☆☆

White Powder, Odorless
Flashpoint: Not applicable
May cause mechanical irritation to eyes and skin.
Prolonged or repeated overexposure may cause lung damage.
This product is not a fire or explosion hazard.

HMIS

H 1
F 0
R 0

PPE†

†Sec. 8

Potential Health Effects

Primary Entry Routes:

Eye contact may cause mechanical irritation if exposed to large amounts of dust.
Skin contact may cause irritation.
Inhalation may cause irritation to respiratory tract and lung damage if exposure is repeated or prolonged.
Ingestion: No adverse effects expected.
Carcinogenicity: NTP: No, IARC: No, OSHA: No

Chronic Health Hazards:

Prolonged inhalation of excessive levels of KAOLIN may cause a benign pneumoconiotic condition, not normally associated with a decrement in lung function. In cases of long term exposure to extremely high levels of dust, progressive fibrosis may occur with lung function impairment.

Medical Conditions Generally Aggravated by Exposure:

Asthmatic conditions may worsen from prolonged and continuous exposure to dust.

Section 4 - First Aid Measures

Inhalation: Remove to fresh air. If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician.

Eye Contact: Flush eyes with plenty of water. If irritation develops, call a physician.

Skin Contact: Procedures normally not needed. If skin contact occurs flush with plenty of water. If irritation develops, call a physician.

Ingestion: Procedures normally not needed. If large quantities are ingested, seek medical advice.

Section 5 - Fire-Fighting Measures

Flash Point: N/A

Autoignition Temperature: N/A

LEL: N/A

UEL: N/A

NFPA HAZARD CLASSIFICATION:

Health: 0

Flammable: 0

Reactivity: 0

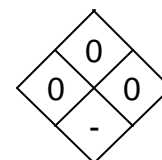
HMIS HAZARD CLASSIFICATION:

Health: 1

Flammable: 0

Reactivity: 0

NFPA



Extinguishing Media: Product will not burn. Use appropriate extinguishing media to extinguish combustible materials stored near-by.

Special Fire Fighting Procedures

Wear NIOSH/MSHA approved positive-pressure self-contained breathing apparatus and protective clothing as specified in 29 CFR 1910.156.

Unusual Fire and Explosion Hazards

This product is not a fire or explosion hazard.

Section 6 - Accidental Release Measures

Vacuum or scoop the spilled material into a container for reclamation or disposal.

NOTE: In the event of an accidental release of this material, the above procedures should be followed.

Additionally, proper exposure controls and personal protection equipment should be used (see Section 8: Exposure Control/Personal Protection), and disposal of the material should be in accordance with Section 11: Disposal Considerations.

Section 7 - Handling and Storage

Handling Precautions: Material may be slippery when wet. Store in a cool, dry location.

Avoid breathing dust.

Avoid contact with eyes.

Use with adequate ventilation.

Section 8 - Exposure Controls / Personal Protection

Exposure Limits

Ingredients: See Section 2.

Respiratory Protection

Use NIOSH-approved dust mask if exposure exceeds PEL/TLV.

Ventilation: General; local exhaust ventilation as necessary to control any air contaminants to within their PELs or TLVs during the use of this product.

Protective Clothing/Equipment: Safety Glasses (with side shields)

Personnel Sampling Procedure:

For NUISANCE DUST; Refer to NIOSH Manual of Analytical Methods (NMAM), 4th Edition, Method 0500.

For RESPIRABLE DUST: Refer to NIOSH Manual of Analytical Methods (NMAM) 4th Edition, Method 0600.

For CRYSTALLINE SILICA: Refer to NIOSH Manual of Analytical Methods (NMAM), 4th Edition, Methods 7500, 7601 and 7602.

Section 9 - Physical and Chemical Properties

Appearance and Odor: White powder. Odorless

Odor Threshold: n/a

Vapor Pressure: n/a

Vapor Density (Air=1): n/a

Formula Weight: n/a

Density: n/a

Specific Gravity (H₂O=1): 2 to 3

pH: 6 to 8

Water Solubility: Insoluble

Other Solubilities:

Boiling Point: n/a

Freezing/Melting Point: n/a

Viscosity: n/a

Refractive Index: n/a

Surface Tension: n/a

% Volatile: 0

Evaporation Rate: n/a

Section 10 - Stability and Reactivity

Stability: Stable

Polymerization: Hazardous polymerization will not occur.

Chemical Incompatibilities: None documented.

Conditions to Avoid: None expected

Incompatibility (Materials to Avoid): None expected

Hazardous Decomposition or By-Products: No hazardous decomposition or by-products are expected.

Section 11 - Disposal Considerations

Disposal: US EPA Waste Number: Not regulated

This product, if disposed as received, is a non-hazardous waste on the basis of TCLP testing under current EPA Hazardous Waste Regulation as defined by 40 CFR Part 261 et al. Disposal/recycling/reclamation requirements will vary by location and type of disposal selected. Consult with state and local regulatory authorities.

NOTE: Chemical additions, processing or otherwise altering this material may make the waste management information presented above incomplete, inaccurate or otherwise inappropriate.

As local regulations may vary; all waste must be disposed/recycled/reclaimed in accordance with federal, state, and local environmental control regulations.

Section 12 - Transportation Information

International

UN Number: Not regulated

United States

EPA Waste Number: Not Regulated

DOT Classification: Not Regulated

Canada

PIN Number: Not Regulated

TDG Class: Not Regulated

EC

DGL: Not determined

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Section 13 - Toxicological Information

| Chemical Name | % Wt. LD50 | LC50 |
|-------------------|-------------------|---------------|
| Kaolin | | |
| CAS No: 1332-58-7 | 100 Not available | Not available |

NOTE: See Section 3, 8 and 14 for additional information.

Section 14 - Ecological Information

Ecotoxicity:

No data available

Environmental Fate:

No data available

Section 15 - Regulatory Information

US Federal Regulations

(TSCA): (TSCA compliant)

SARA 311 and 312 Hazard Categories:

Immediate (Acute) Health Hazard: Yes

Delayed (Chronic) Health Hazard: Yes

Fire Hazard: No

Reactivity Hazard: No

Sudden Release of Pressure: No

SARA SECTION 313 NOTIFICATION

This product does not contain toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

OZONE DEPLETING SUBSTANCE (ODS)

This product neither contains nor is manufactured with an ozone depleting substance subject to the labeling requirements of the Clean Air Act Amendments 1990 and 40 CFR Part 82.

VOLATILE ORGANIC COMPOUNDS (VOC)

None

US STATE REGULATIONS

Volatile Organic Compound (CARB): None

CANADIAN REGULATIONS

DSL/NDSL: DSL

WHMIS Classification: Not regulated

EUROPEAN REGULATIONS

EINECS: Yes

OTHER REGULATIONS

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MITI (Japan): Yes
AICS (Australia): Yes

Section 16 - Other Information

Prepared By: C. Bills

Revision Notes:

Disclaimer: *The information in this Material Safety Data Sheet should be provided to all who will use, handle, store, transport, or otherwise be exposed to this product. This information has been prepared for the guidance of plant engineering, operations, and management and for persons working with or handling this product. The information presented in the MSDS is premised upon proper handling and anticipated uses and is for the material without chemical additions/alterations. We believe this information to be reliable and up-to-date as of the date of publication, but make no warranty that it is. Additionally, if this Material Safety Data Sheet is more than three years old, please contact the supplier at the phone number listed in Section 1 to make certain that this sheet is current. Copyright Engelhard Corporation. License granted to make unlimited copies for internal use only. End of MSDS.....*