

Material Safety Data Sheet

Minerit® HD

Section 1 Product and Company Identification

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|--------------------|---|----------------------------|----------------|
| Trade Name | Minerit® HD (Heavy Duty) | MSDS No. | AFC 20-102 |
| Product | Fiber cement board | Revision No. | 01 |
| Distributor | American Fiber Cement Corporation | Issue Date | July 15, 2008 |
| Address | 6901 S. Pierce St, Suite 260 Littleton, Colorado 80128 U.S.A. | Technical Support | (800) 688-8677 |
| | | CHEMTREC | (800) 424-9300 |
| | | <i>Outside the US Call</i> | (703) 741-5500 |

Section 2 Composition / Information on Ingredients

| Chemical Name | CAS No. | Weight (%) | TLV (ACGIH) | PEL (OSHA) |
|-------------------|------------|------------|----------------------|----------------------|
| Cement | 65997-15-1 | 40 – 80 | 10 mg/m ³ | 50 mppcf |
| Cellulose | 9004-34-6 | 5 – 15 | 10 mg/m ³ | 15 mg/m ³ |
| Limestone | 1317-65-3 | 10 – 50 | None | None |
| Polyvinyl alcohol | 9002-89-5 | < 2 | None | None |

*Note: (1) TLV and PEL values are 8-hour time-weighted averages for respirable dust, unless otherwise specified. (2) The TLV values are for particulate matter containing no asbestos and <1% crystalline silica. (3) * = Total Dust.*

Section 3 Hazards Identification

EMERGENCY OVERVIEW

This product is not considered hazardous under normal conditions of use. Airborne particulates created during cutting, milling and sanding are considered nuisance dust, and should be minimized through the use of proper work practices and adequate ventilation.

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|------------------------|---------------------------------|---------------|---------------------|-------------------------|
| NFPA Rating | Health 0 | Fire 0 | Reactivity 0 | Special Hazard 0 |
| HMIS Rating | Health 1 | Fire 0 | Reactivity 0 | PPE Code E |
| Hazard Category | Acute (Immediate) Health Hazard | | | |

Routes of Entry Lungs and respiratory system via respirable dust (inhalation), and eyes via coarse dust and particulates.

Target Organs Lungs, respiratory system, and eyes.

Signs and Symptoms of Overexposure

Inhalation Irritating to the mucous membranes and lungs. Excessive exposure to dust may cause sore throat, coughing and upper respiratory irritation.

Section 3 Hazards Identification

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| Skin Contact | Long-term exposure to product dust may cause dryness and/or irritation. |
| Eye Contact | Product dust is a mechanical irritant which may cause moderate to severe eye irritation and dryness. |
| Ingestion | Non-hazardous when ingested. May cause mild irritation to the gastro-intestinal (GI) tract and mouth if excessive quantities are ingested. |
| Medical Conditions Aggravated by Exposure | Medical conditions which may be aggravated by exposure to this product include, dry skin and/or dermatitis, and pre-existing chronic upper respiratory and lung diseases such as bronchitis, emphysema and asthma. |
| Carcinogenicity | The ingredients in this product are not considered carcinogenic. |

Section 4 First Aid Measures

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| Inhalation | Remove to fresh air. Drink plenty of water, and blow nose to evacuate remaining dust. If coughing and irritation develop seek medical attention. |
| Eye Contact | Flush with large amounts of water until irritation subsides, at least 15 minutes. Seek medical attention if irritation persists. |
| Skin Contact | Perform normal, good hygiene practices. Wash with mild soap and warm water after each exposure. |
| Ingestion | Emergency first-aid procedures are not normally required following ingestion. However, this product may cause temporary irritation to the gastro-intestinal (GI) tract and mouth if excessive quantities are ingested. |

Section 5 Fire Fighting Measures

NFPA Classification Not classified by the National Fire Protection Agency (NFPA).

Flammable Properties and Explosive Limits

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| Flash Point | Non-flammable |
| Autoignition | N/A |
| UFL / UEL | N/A |
| LFL / LEL | N/A |
| Extinguishing Media | Dry chemical, carbon dioxide (CO ₂), water fog, or foam. |
| Fire and Explosion Hazard | This product is non-flammable, and does not pose a significant fire and/or explosion hazard. |
| Special Firefighting Equipment | No special firefighting equipment is necessary. Use extinguishing media appropriate for the surrounding fire. Firefighters should wear protective clothing and use a self-contained breathing apparatus (SCBA). |
| Hazardous Products of Combustion | None expected. |

Section 6 Accidental Release Measures

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| Personal Precautions | If dusty conditions exist (i.e., during cutting, sanding or milling), wear a NIOSH-approved dust mask, such as the 3M 8511 N-95 or equivalent. |
| Environmental Precautions | Environmental precautions are not normally required. This product does not pose a significant threat to the environment. |
| Clean-Up Procedures | Before clean-up, wet down dust and debris with a fine water spray to suppress airborne particulates. Pick up, shovel or sweep material into an approved waste disposal container. Use equipment fitted with a high-efficiency particulate (HEPA) filter to vacuum clean dust. |

Section 7 Handling and Storage

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| Handling Precautions | Fiber cement boards do not present a hazard in their intact state. Assure proper respiratory protection during cutting, milling or sanding, or if the dust potential exceeds the established TLV/PEL. Refer to <i>Exposure Controls and Personal Protection</i> in <i>Section 8</i> for further information. |
| Storage Requirements | Store in a cool, dry, well ventilated area away from food and beverages. Keep away from reactive materials and always separate materials by hazard class. Refer to <i>Stability and Reactivity</i> in <i>Section 10</i> for incompatibility information and conditions to avoid. |

Section 8 Exposure Controls and Personal Protection

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| Engineering Controls | Maintain sufficient mechanical or natural ventilation to assure dust concentrations remain below the established TLV/PEL. Use local exhaust if necessary. Power equipment used during cutting, sanding or milling should be fitted with a properly designed dust collection device. |
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| Respiratory Protection | Wear a NIOSH-approved dust mask (i.e., 3M 8511 N-95 or equivalent) to limit exposure to product dust. Respiratory selection should be based on the level of exposure as measured by dust sampling. Concentrations that exceed the recommended dust mask limits may require a higher level of protection, such as a half-mask respirator with appropriate dust filters. |
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| Eye Protection | Wear safety glasses with side shields, goggles or face-shield when cutting, milling or sanding to protect eyes from dust and airborne particulates. Selection and use of eye protection should comply with ANSI Z87.1-1-1989 and applicable OSHA standards. |
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| Skin Protection | Under normal conditions, protective gloves and a clean body covering are sufficient. Direct skin contact with dust and debris can be further minimized by wearing long-sleeved shirts and long trousers. |
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Section 9 Physical and Chemical Properties

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| Physical Form | Solid, thin boards | Odor | No characteristic odor |
| Color | Gray | Odor Threshold | N/A |
| Specific Gravity | 1.5 | pH | ~ 11* |
| Boiling Point | N/A | Density @ 68° F (20° C) | 1700 kg/m ³ |
| Melting Point | > 2300° F (1260° C) | Vapor Pressure | N/A |
| Evaporation Rate | N/A | % Volatile by Vol. / Wt. | N/A |
| Solubility in Water | Insoluble | Viscosity | N/A |

* pH reduction to neutral with 5 to 10 years.

Section 10 Stability and Reactivity

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| Stability | This product is stable under normal conditions of use. |
| Incompatibility | Limestone is incompatible with acids and ammonium salts. |
| Conditions to Avoid | Avoid strong acids and ammonium salts. Contact with powerful oxidizing agents (i.e., fluorine, chlorine trifluoride) may present a fire hazard. |
| Hazardous Polymerization | Will not occur. |
| Hazardous Products of Decomposition | Decomposition of residual organic fibers will emit carbon monoxide (CO) and carbon dioxide (CO ₂) fumes during initial exposure to service temperatures. |

Section 11 Toxicological Information

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| Toxicological Hazards | No toxicological studies of this product have been performed. Refer to the <i>Hazards Identification</i> in <i>Section 3</i> for additional health-related information. |
| Teratogenic Effects | No additional information is available. |
| Mutagenic Effects | No additional information is available. |

Section 12 Ecological Information

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| Ecotoxicity | Most ingredients in this product are naturally occurring minerals and, unless contaminated in service, are not hazardous to the environment. |
| BOD5 / COD | No additional information is available. |
| Products of Biodegradation | No additional information is available. |

Section 13 Disposal Considerations

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| Disposal Method | May be disposed in an approved landfill in accordance with local, state and federal regulations. If this product has become contaminated in service, place in an approved hazardous waste container. Seal and properly label the container, and send to a Transportation, Storage and Disposal (TSD) facility via an approved waste hauler. |
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Section 14 Transportation Information**U.S. Department of Transportation (DOT)**

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| Shipping Name | Not a U.S. Department of Transportation (DOT) controlled substance. | | |
| Hazard Class | N/A | UN / NA Number | N/A |
| Label / Placard | N/A | Packing Group | N/A |

International Dangerous Goods Information

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| ICAO | Not regulated as a dangerous code according to the International Civil Aviation Organization (ICAO) technical instructions. |
| IMO / IMDG | Not regulated as a dangerous code according to the International Maritime Organization's (IMO) dangerous goods code. |
| TDG / TDGA | Not regulated as a dangerous code according to the Canadian Transportation of Dangerous Goods (TDG) Act. |

Special Provisions This product does not require special transport provisions.

Section 15 Regulatory Information

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| TSCA Inventory | All ingredients are listed on the Toxic Substances Control Act (TSCA) inventory. |
| DSL (Canada) | All ingredients are listed, or exempt from inclusion, on the Canadian Domestic Substances List (DSL). |
| CERCLA Reportable Quantity (RQ) | Does not contain any hazardous substances in excess of the CERCLA de minimis reportable quantity. |

Superfund Amendments and Reauthorization Act (SARA) Title III

Section 302 / 304 This product contains the following Extremely Hazardous Substances (EHS) as defined and listed under SARA Title III, Sections 302 and 304:

| <u>Chemical Name</u> | <u>Sec. 302 TPQ</u> | <u>Section 304 RQ</u> |
|----------------------|---------------------|-----------------------|
| None | | |

Section 311 / 312 This product meets the following EPA Hazard Categories as defined and listed under SARA Title III, Sections 311 and 312:

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|-------------------|-----|
| Acute Hazard | Yes |
| Chronic Hazard | No |
| Fire Hazard | No |
| Reactivity Hazard | No |
| Pressure Hazard | No |

Section 313 This product contains the following substances subject to the reporting requirements of SARA Title III, Section 313:

| <u>Chemical Name</u> | <u>CAS No.</u> | <u>Weight (%)</u> |
|----------------------|----------------|-------------------|
| None | | |

Section 15 Regulatory Information**Other Regulatory Classifications**

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| California Proposition 65 | This product does not contain any substances known to the State of California to cause cancer. |
| State RTK Lists | Not Listed |
| WHMIS (Canada) | Not Listed |
| DSCL (Europe) | Not Listed |

Section 16 Other Information

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| Reason for Issue | WHMIS update and format revision | Issue Date | July 15, 2008 |
| Prepared By | CCG, Inc. | Supersedes Date | All previous |
| Revision History | None | | |

DISCLAIMER

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