

MATERIAL SAFETY DATA SHEET

Alfred FR Metal Composite Material



Fire Resistant & Non-Combustible Cladding

SECTION 1: PRODUCT IDENTIFICATION

A. Product Name	Alfred FR
B. Recommended Use	Fire-resistant composite wall cladding material
C. Restriction on Use	None
D. Manufacturer/Importer/Distributor	Alfred, LLC 943 Gainesville Hwy. Bldg. 100-4000 Buford, GA 30518 USA +1.470.589.7449
E. Emergency Phone Number	Chemtrec 1-800-424-9300
F. Website	www.alfredusa.com
G. Initial Release Date	14-February-2018
H. Revision Date	01-July-2020
I. Version Number	2.0

SECTION 2: HAZARD IDENTIFICATION

A. Classification	Not classified as hazardous per OSHA Hazard Communication Standard, 29 CFR 1910.1200.
B. Safety Phrase(s)	Not Applicable
Hazard Statement(s)	Not Applicable
Signal Word	Not Applicable
Symbol(s)	Not Applicable
Precautionary Statement	Not Applicable
- Prevention	Not Applicable
- Response	Not Applicable
- Storage	Not Applicable

Alfred FR MCM is defined under OSHA Hazard Communications standard 29 CFR 1910.1200 as an "article". As such, it is a manufactured item other than a fluid or particle, formed to a specific design during manufacture with end functions dependent in whole or in part upon its' shape or design use during end use, and which under normal conditions of used does not release, or otherwise result in exposure to hazardous chemicals, nor pose a physical hazard or health risk to employees.

SECTION 3: COMPOSITE / INFORMATION ON INGREDIENTS

Components	CAS Number	Percent % by Weight
Aluminum	7429-90-5	38%
Magnesium Hydroxide Mineral Filler	1309-42-8	43%
Polyethylene	9002-88-4	17%
Others (less than 1% each in weight)	-	2%

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SECTION 4: FIRST-AID MEASURES

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| A. Eye Contact | Dust from processing. Rinse eyes with water or saline solution for at least 15 minutes. Seek medical attention from a physician. |
| B. Skin Contact | Dust from processing. Wash skin with soap and water for at least 20 minutes while removing contaminated clothing and shoes. Seek medical attention from a physician. |
| C. Inhalation | Dust from processing. Move to fresh air. Seek medical attention from a physician. |
| D. Ingestion | Not inspected due to composition and form of product. Seek medical attention from a physician. |
| E. Most Important Symptoms & Effects | Prolonged exposure to dust and fumes may aggravate pre-existing chronic conditions of the skin or respiratory system. |
| F. Indication if Immediate Medical Attention and Special Treatment Needed | Notify medical personnel of any situation and avoid overexposure to irritants. |

SECTION 5: FIRE FIGHTING MEASURES

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| A. Suitable Extinguishing Media | Use Class D extinguishing agents on fines or molten metal. Do not use halogenated extinguishing agents on small chips, fines, or dust. |
| B. Specific Hazards | Dust from processing. Wash skin with soap and water for at least 20 minutes while removing contaminated clothing and shoes. Seek medical attention from a physician. |
| C. Special PPE and Precautions for Firefighters | Protective equipment including self-contained breathing apparatus. |

SECTION 6: ACCIDENTAL RELEASE MEASURES

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| A. Personal & Environmental Precautions | Avoid contact with sharp edges or heated metal. Wear protective gloves. No special environmental precautions are required. |
| B. Method and Materials for Containment and Cleaning | Clean releases of dust by sweeping the area and depositing in a closed container. Take measures to block dust from reaching surface water or grassy areas. |

SECTION 7: HANDLING AND STORAGE

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| A. Precautions for Safe Handling | Avoid generating dust. Avoid contact with sharp edges or heated metal. There is no visual difference between hot and cold aluminum. |
| B. Conditions for Safe Storage | No special storage precautions noted. |

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SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

A. OSHA Permissible Exposure Limit	Aluminum	15mg/m ³ (Total), 10mg/m ³ (Respirable)
	Magnesium Hydroxide	10mg/m ³ (Total), 5mg/m ³ (Respirable)
	Polyethylene	10mg/m ³ (Total), 5mg/m ³ (Respirable)
B. Appropriate Engineering Controls	A system of local and/or general exhaust is recommended to keep employee exposures below the Exposure Limits.	
C. Individual Protection Measures (PPE)		
- Eye & Face Protection	Wear primary eye protection such as splash resistant safety goggles with a secondary protection face shield.	
- Respiratory Protection	Use an approved respirator designed for the specific hazards where concentrations exceed exposure limits.	
- Skin & Body Protection	Wear cut resistant gloves and avoid contact with sharp edged objects and materials	
- Thermal Protection	When handling heated materials, wear gloves and proper clothing to cover exposed areas and protect against thermal burns.	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

A. Appearance	Solid, Various Colors	
B. Odor	Odorless	
C. Odor Threshold	Not Applicable	
D. pH	Not Applicable	
E. Melting Point / Freezing Point	Aluminum	660°C (1221°F)
	Magnesium Hydroxide	105°C (220°F)
	Polyethylene	350°C (662°F)
F. Flash Point	Not Applicable	
G. Evaporation Rate	Not Applicable	
H. Flammability (Solid, Gas)	Not Applicable	
I. Upper / Lower Flammability or Explosive Limits	Not Applicable	
J. Solubility	Insoluble	
K. Vapor Density	Not Applicable	
L. Specific Gravity	1.7 - 1.9g/cm ³	
M. Partition Coefficient: n-Octanol/water	Not Applicable	
N. Auto Ignition Temperature	460°C (860°F)	
O. Decomposition Temperature	Not Applicable	
P. Viscosity	Not Applicable	
Q. Molecular Weight	Not Applicable	

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Alfrex FR Metal Composite Material



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SECTION 10: STABILITY AND REACTIVITY

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| A. Chemical Stability | Stable under recommended storage and handling conditions. |
| B. Possibility of Hazardous Reactivity | Stable under recommended storage and handling conditions. |
| C. Conditions to Avoid | Heating, flames and hot surfaces. |
| D. Incompatible Materials | Combustible materials. |
| E. Hazardous Decomposition Products | Carbon monoxide, carbon dioxide, nitrogen oxide and smoke. Under certain conditions some aliphatic aldehydes and carboxylic acids may form. |

SECTION 11: TOXICOLOGICAL INFORMATION

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| A. Toxicity Data | No toxicity data available for finished panel or individual components. |
| B. Suspected Cancer Agent | Trace elements used in the paint coatings for this product may be known cancer causing agents. |
| C. Irritancy of Product | Airborne particles of aluminum and or product materials may irritate the eyes and respiratory tract. |
| D. Sensitization of Product | The product is not known to cause human skin or respiratory sensitization. |

SECTION 12: ECOLOGICAL INFORMATION

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| A. Ecotoxicity | No toxicity effects. |
| B. Persistence and Degradability | Not Applicable |
| C. Bio-accumulative Potential | Not Applicable |

SECTION 13: DISPOSAL INFORMATION

Disposal must be in accordance with current applicable laws and regulations and material characteristics at time of disposal. Recover and reclaim or recycle, if practical. Aluminum in the form of particle may be reactive. Its hazardous characteristics, including fire and explosion, should be determined prior to disposal.

SECTION 14: TRANSPORTATION

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| A. UN Number | Not Applicable |
| B. UN Proper Shipping Name | Not Applicable |
| C. Transport Hazard Class | Not Applicable |
| D. Packing Group | Not Applicable |
| E. Environmental Hazards | Not Applicable |
| F. Special Precautions for User | Not Applicable |

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SECTION 15: REGULATORY INFORMATION

OSHA: NOT classified as hazardous under the criteria in 29 CFR 1910.1200, Hazard Communication.

U.S. SARA REPORTING REQUIREMENTS: The product components are not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for any component of the product.

U.S. TSCA INVENTORY STATUS: The components of this product are listed in the TSCA Inventory.

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): There may be elements present in the dust generated from the processing of this product, trace amounts, that are on the California Proposition 65 list. Warning! This product contains chemicals known to the State of California to cause cancer.

CANADIAN DSL/NDL INVENTORY STATUS: The components of this product are on the DSL Inventory, or are exempted from listing.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: No component of this product is on the CEPA First Priorities Substance Lists.

CANADIAN WHMIS CLASSIFICATION AND SYMBOLS: Not Applicable

SECTION 16: OTHER INFORMATION

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