

MATERIAL SAFETY DATA SHEET

MSDS PREPARED BY: Arabian Vermiculite Industries
P. O. Box 7137
Dammam 31462, Saudi Arabia
Telephone Number for Emergency Response
In Saudi Arabia: +966 (13) 847 1450

MSDS Number: Z-01747

Date: 07/02/2012

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Names and Synonyms **Avikote AV 650**
(SEE SECTION 12 FOR ADDITIONAL PRODUCT IDENTIFICATION)
Chemical Names and Family Cementitious Mixture
Product Use Fireproofing Product
Formula Blend of Portland Cement, Styrene Polymer, Cellulose and Chopped Glass Filament
CAS# (Chemical Abstract Service) Mixture-NA

Transportation/Hazard Classification

Proper Shipping Name : Not applicable **TDG Class** : Non-hazardous
Hazard Class : Non-hazardous
Identification # : Not applicable
Label(s) Required : Not applicable
Surface Freight : Wall Plaster
Classification
NPCA-HMIS Hazard Index

▪ Health	1
▪ Flammability	0
▪ Reactivity	0
▪ Personal Protection	B, E (Section 8)

SECTION 2 - HAZARDOUS INGREDIENT AND MAJOR COMPONENT INFORMATION (SEE SECTION 11 FOR COMPLETE CHEMICAL NAMES)

Ingredient	CAS #	Percent (mx)
Bauxite	001318-16-7	25-50
Fuller's earth	008031-18-3	1-10
Chopped continuous glass filament	065997-17-3	1-10
Portland cement	065997-15-1	25-50
Pulp cellulose	065996-61-4	1-10
Quartz	014808-60-7	< 1

SECTION 3 - HAZARDOUS IDENTIFICATION

Emergency Overview:

Warning!
Irritating to eyes, skin and respiratory system.
Prolonged exposure may cause alkali burns resulting in damage to skin and eyes.
Prolonged exposure may cause risk of lung disease (i.e. silicosis and/or lung cancer).

HMIS Rating:

Health	2*
Flammability	0
Reactivity	0
Personal Protective Equipment	B (See Section 8)

Potential Health Effects:**Inhalation**

Causes respiratory tract irritation.

Exposure may aggravate chronic respiratory conditions such as asthma or bronchitis. Long-term inhalation of dust may increase risk of contracting pneumoconiosis (“dusty lungs”) and reduced pulmonary function. Prolonged inhalation of respirable crystalline silica dust can result in lung disease (i.e. silicosis and/or lung cancer). Symptoms include coughing, shortness of breath, wheezing and reduced pulmonary function.

Eye Contact

Eye contact causes irritation.

Prolonged contact may cause may cause physical injury.

Skin Contact

Skin contact causes irritation.

Prolonged skin contact causes burns especially if skin or product is wet. This may occur without warning since little heat is sensed. Prolonged skin contact can result in permanent damage. May cause sensitization due to Hexavalent chromium contained in Portland Cement. Exposure to skin may produce “cement” dermatitis which is due to the alkaline and abrasive properties of cement dust.

Skin Absorption: Not expected to be harmful if absorbed through skin.

Ingestion

If ingested, causes irritation or burns to the linings of the mouth, esophagus and stomach.

SECTION 4 - FIRST AID MEASURES**Skin Contact**

Wash with soap and water.

If discomfort or irritation persists, consult a physician.

Remove contaminated clothing and wash before reuse.

Eye Contact

Flush eyes with water for at least 15 minutes while holding eyelids open.

Get immediate medical attention.

Ingestion

Do not induce vomiting.

Never give anything by mouth to an unconscious person.

If discomfort or irritation persists, consult a physician.

Inhalation

If symptoms develop, get fresh air. If symptoms persist, consult a physician.

If breathing has stopped, give ratification respiration then oxygen if needed.

SECTION 5 - FIRE & EXPLOSION HAZARD DATA

Flash Point : Not applicable

Flash Point Method : Not applicable

Lower Explosion Limit : Not available

Upper Explosion Limit : Not available

Auto-Ignition Temperature : Not available

Flash Point : Not applicable

NFPA RATING

Health 2

Flammability 0

Reactivity 0

Extinguishing Media Not applicable, product will not burn

Special Fire Fighting Procedure None, no special procedure specific to this product

Unusual Fire and Explosion Hazard None unless noted below

SECTION 6 - ACCIDENTAL RELEASE MEASURES**Spills / Leaks**

If spilled, prevent material from entering water systems. Observing the listed Precautionary Measures found in Section 7 of this document. Dry spills should be immediately swept up and placed in a suitable container to prevent further release of material. Slurry spills should be immediately contained (to minimize the extent of the spill) and absorbed with an inert, non-combustible material. Place material in a

suitable container to prevent further release. Use proper personal equipment. Do not flush to sewer or allow to enter waterways.

SECTION 7 - HANDLING AND STORAGE

Precautionary Measures

Avoid contact with eyes, skin and clothing.
 Wear skin and eye protection to avoid contact with dust or spray.
 Do not take internally.
 Practice good personal hygiene to avoid ingestion.
 Use only with adequate ventilation.
 Wash clothing before reuse.
 Equip mixers with dust covers.
 Provide respiratory protection if needed.
 Wear skin and eye protection to avoid contact with dust or spray.
 Post "Slippery When Wet" signs where appropriate.
 Use anti-slip surfaces on working platforms.
FOR PROFESSIONAL USE ONLY. KEEP OUT OF CHILDREN'S REACH.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT

Ingredient	EXPOSURE GUIDELINE IN THE USA				OSHA PEL		Other
	ACGIH TLV			TWA	STEL	Ceiling	
Bauxite	-	-	-	-	-	-	-
Fuller's earth	-	-	-	-	-	-	-
Chopped continuous glass filament	-	-	-	-	-	-	-
Portland cement	10 mg/m ³ TWA (particulate matter containing no asbestos and <1% crystalline silica)	-	-	10 mg/m ³ TWA (total dust; 5 mg/m ³ TWA (respirable fraction)	-	-	-
Pulp cellulose	-	-	-	-	-	-	-
Quartz	0.025 mg/m ³ TWA (respirable fraction)+	-	-	-	-	-	-

In addition to the exposure limits referenced above, the following non-specific limits for dust apply to this product: OSHA, 15 mg/m⁻³ - TWA or Total Dust and 5 mg³ - TWA as Respirable Dust, ACGIH, 10 mg/m³ - TWA as Total Dust and 3 mg/m³ - TWA as Respirable Dust.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State : Solid
 Appearance / Odor : Coarse, free flowing grey powder, no odor
 Odor Threshold: (ppm) : Not determined
 pH : 11-13 for Portland Cement
 Vapor Pressure (Mm Hg) : Unknown
 Vapor Density (Air = 1) : Unknown
 Solubility in Water : Slight
 Specific Gravity (Water = 1) : Not available
 Evaporation Rate (Butyl Acetate = 1) : Unknown
 Boiling Point : >212° F/100°C
 Viscosity : Unknown
 Bulk Density (Pound/Cubic Foot) (PCF) : 17-25
 % Volatiles (gr/L): (70°F) (21°C) : Unknown

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability - Stable
 Conditions To Avoid - Polyunsaturated liquids
 Hazardous Polymerization - Will not polymerize
 Hazardous Decomposition Products - Carbon dioxide, Carbon monoxide and trace amount of Nitrogen and Asphyxiants

SECTION 11 - TOXICOLOGICAL INFORMATION

Ingredient (No date unless listed)	CAS Number	LD50 and LC50
---	-------------------	----------------------

Carcinogenicity:

Ingredient	IARC Group 1	IARC Group 2A	IARC Group 2B	NTP Known	NTP Suspect	OSHA
Bauxite	No	No	No	No	No	No
Fuller's earth	No	No	No	No	No	No
Chopped continuous glass filament	No	No	No	No	No	No
Portlant cement	No	No	No	No	No	No
Pulp, cellulose	No	No	No	No	No	No
Quartz	Yes	No	No	No	No	Yes

Mutagenicity:	Not applicable
Teratogenicity:	Not applicable
Reproductive Toxicity:	Not applicable

SECTION 12 - ECOLOGICAL INFORMATION

Environmental Fate	- No data available for product
Ecotoxicity	- No data available for product

SECTION 13 - DISPOSABLE CONSIDERATIONS

Waste Disposal Procedures Consult all regulations (federal, state, provincial, local) or a qualified waste disposal firm when characterizing waste for disposal. According to EPA (40 CFR # 261), waste of this product is not defined as hazardous. Dispose of waste in accordance with all applicable regulations.

Wastes of this product such as empty bags and excess material are typically not defined as hazardous.

SECTION 14 - TRANSPORTATION INFORMATION

Proper Shipping Name:	Not Applicable
UN/NA Number:	Not Applicable
Domestic Hazard Class:	Non Hazardous
Surface Freight Classification:	Wall plaster
Label/Placard Required:	Not Applicable

SECTION 15 - REGULATORY INFORMATION**REGULATORY CHEMICAL LISTS:**

CERCLA (Comprehensive Response Compensation and Liability Act):
(None present unless listed below)

<u>Chemical Name</u>	<u>CAS#</u>	<u>Wt %</u>	<u>CERCLA RQ</u>
----------------------	-------------	-------------	------------------

SARA Tile (Superfund Amendments and Reauthorization Act)**SARA Section 312 / Tier I and II Hazard Categories:**

Health Immediate (acute)	Yes
Health Delayed (chronic)	Yes
Flammable	No
Reactive	No
Pressure	No

302 Reportable Ingredients (Identification Threshold 1%):

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>	<u>SARA 302 TPQ</u>
----------------------	--------------	-------------	---------------------

313 Reportable Ingredients (Chemical present below reporting threshold are exempt):

<u>Chemical Name</u>	<u>CAS #</u>	<u>Wt %</u>
----------------------	--------------	-------------

National Volatile Organic Compound Emission Standards for Architectural Coatings:

Volatile Organic Content: (gr/L)	Not Applicable
----------------------------------	----------------

WHMIS Classification(s):	D2 A
---------------------------------	------

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR). This MSDS contains all the information required by the CPR.

State Regulatory Information:

California Proposition 65: WARNING! This product contains substances known to the state of California to cause cancer, birth defects or other reproductive harm.

Massachusetts Hazardous Substance List (Identification threshold 0.001 (1ppmm)):

Chemical Name	CAS #	Wt %
Quartz	014808-60-7	.531

New Jersey Hazardous Substance List (Identification threshold 0.01%):

Chemical Name	CAS #	Wt %
---------------	-------	------

Pennsylvania Hazardous Substance List (Identification threshold 0.01%)

Chemical Name	CAS #	Wt %
---------------	-------	------

CHEMICAL INVENTORY STATUS:

All chemicals in this product are listed or exempt from listing in the following countries

US	CANADA		EUROPE	AUSTRALIA	JAPAN	KOREA	PHILIPPINES
TSCA	DSL	NDSL	EINECS/ELINCS	AICS	ENCS	ECL	PICCS
Yes	Yes	No	Yes	Yes	Yes	Yes	Yes

SECTION 16 – OTHER INFORMATION

Non-Hazardous Ingredient Disclosure:

<u>Chemical Name</u>	<u>CAS Number</u>
Prepared by:	EH&S Department
Approved By:	EH&S Department
Approved Date:	07/02/2010

Disclaimer:

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection".