



Technical specification Stone Veneer

(A) Physical and Chemical Properties

Form / Appearance	Material is a polyester resin
Color	Based on specification
Odor	None
Flammability	Not Determined
Melting Point	482-572°F (250-300°C)
Odor Threshold	Not Determined
Solubility (H2O)	Insoluble
VOC (Weight %)	Not applicable

(B) Chemical Stability and Reactivity Information

CHEMICAL STABILITY

Stable, however, may decompose if heated. Molten polymer or prolonged air drying of polymer at temperatures above 195 °C will release small quantities of acetaldehyde.		
NIOSH – Pocket guide – IDLHs (immediately dangerous to life or health).		
Acetaldehyde	75-07-0	2000 ppm IDLH
U.S. – OSHA-Final PELs-Time Weighted averages (TWAs)		
Acetaldehyde	75-07-0	200 ppm TWA ; 360 mg/m ³ TWA
U.S. –OSHA- Vacated PELs-TWAs		
Acetaldehyde	75-07-0	100 ppm TWA ; 180 mg/m ³ TWA
ACGIH-Threshold Limits Values- Ceiling (TLV-C)		
Acetaldehyde	75-07-0	25 ppm Ceiling

(C) Toxicological Information

Due to this material's high molecular weight, and results of toxicity studies of similar products, this material is considered to be of little to no toxicological concern.

(D) Ecological Information

Ecotoxicity

This product is not expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems. Based on similar substances, this material is expected to be essentially non-biodegradable.

(E) Disposal Considerations

Disposal Instructions

Any unused product, in discarded, is not considered a RCRA hazardous waste. Dispose of as a non hazardous waste in accordance with local, state and federal regulations. The information offered here is for the product as shipped. Use of and / or alteration to the product, such as mixing with other materials, may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method

FIBER GLASS :

(A) Composition of E-glass

SiO ₂	52-62 %
Alkaline oxides (Na ₂ O ₂ , K ₂ O)	< 2 %
Alkaline terrous oxides (CaO, MgO.....)	16-30 %
B ₂ O ₃	0-10 %
Al ₂ O ₃	11-16 %
TiO ₂	0-3 %
Fe ₂ O ₃	0-1 %
F ₂	0-2 %

(B) PHYSICAL AND CHEMICAL PROPERTIES

--- **PHYSICAL STATE** : Solid

---**FORM** : Continuous or chopped strand mats glued or chopped strands or continuous woven fabric.

---**COLOUR** : White or yellowish white.

---**ODOUR** : None, except for some products from which a slight odor is sometime released when a pallet or carton is opened. This odor never indicates that an eventual Toxic product has been released in a dangerous amount. PH not applicable.

---**SPECIFIC TEMPERATURE AR WHICH CHANGES IN PHYSICAL STATE OCCUR**

- Softening point : Littleton point (defined as the temperature for which the viscosity of the glass is 10 Poises) approximately 850 °C
- Melting point : Not applicable. Glass dose not melt, but viscosity decreases by elevation of the temperature for E glass is in a range of temperature between 1150 °C abd 1250 °C (fibeizing temperature)

---**DECOMPOSITION TEMPERATURE** : Sizes and mat binder start to decompose at 200°C

---**EXPLOSIVE PROPERTIES** : None

---**DENSITY** : (Molten glass)

---**SOLUBIBITY** : Very low solubility in water. Sizes and binders can be partially (and even totally) dissolved in most organic solvent.

STONE VENEER MAJOR INGREDIENTS :

S.No.	MATERIAL	INGREDIENTS	CONCENTRATION
1.	Polyester Resin	Polyethylene Terephthalate	99-99.9 %
		Titanium Dioxide	< 1 %
2.	Fiber Glass (Non-Respirable)		% weight 90% min
	Size and Binder		< 10% min
3.	Pigments and Colors and Stone	Minimal	Very Small

MATERIAL COMPOSITION OF STONE VENEER :

S.No.	Material composition of Stone Veneer	QUANTITY KG./Sq. MTR.
1	Processing Material	1.300
2	Backing Material	0.150
3	Natural Stone	0.100
	Total Weight per SQ. MTR	1.500-1.600
4	Thickness of Stone Veneer layer	0.40mm
5	Thickness of other Chemicals with backing	0.80mm
	Total Thickness of slate Stone Veneer Sheet	1.20mm-1.50mm

PHYSICAL PROPERTIES OF STONE VENEER :

S.No.	PHYSICAL PROPERTIES OF STONE VENEER	TEST Value Slate	TEST Value Mica
1	Water absorption, % by wt. (Test carried out on thin slate specimen)	2.5	1.9
2	Water absorption, % wt. (Test carried out on thin slate specimen pasted on marble piece)	0.17	0.12
3	Abrasion test ---Average wear, mm ---Max. Wear on individual specimen, mm	0.7 0.8	0.9 1.0
4	Density (Mass per unit area, kg/M2	1.45	1.66

SECTION # 1 – HAZARDOUS CONSTITUENTS OF STONE VENEER

COMPONENT	CAS NUMBER	PERCENT	PERMISSIBLE EXPOSURE LIMIT (TWA)	SHORT TERM EXPOSURE LIMIT (STEL)
Vinil acetate homopolymer	9003-20-7	51±2%	NH/NA	NH/NA
Residual monomer	108-05-4	<0.3 % max	10 ppm	20 ppm

SECTION # 2 – IDENTIFICATION OF HAZARDS OF STONE VENEER

Toxic Effects of exposure / Contact :

SKIN CONTACT : MAY IRRITATE SKIN ON PROLONGED OR REPEATED CONTACT.

EYE CONTACT : MAY CAUSE SLIGHT IRRITATION TO EYES.

INHALATION : NOT POSSIBLE BEING DRY PRODUCT.

INGESTION : NOT PERMISSIBLE.

DELAYED EFFECTS : NOT REPORTED.

SECTION # 3 – FIRST AID MEASURES OF STONE VENEER

SKIN CONTACT : WASH SKIN WITH WATER AFTER HANDLING SHEETS.

EYE CONTACT : MATERIAL BEING DRY DOES NOT EFFECT EYES.

INHALATION : INERT SMELT

NOTE TO PHYSICIAN : THERE IS NOT SPECIFIC ANTIDOTE. TREATMENT SHOULD BE GIVEN SYMPTOMATICALLY ON THE CLINICAL CONDITION.

SECTION # 4 – FIRE AND EXPLOSION HAZARD OF STONE VENEER

FIRE EXTINGUISHING MEDIA : MATERIAL WILL BURN. USE WATER, FOAM DRY CHEMICAL POWDER, CO2 TO EXTINGUISH THE FIRE.

TERMAL DECOMPOSITION PRODUCT : MAY YIELD ACRID SMOKE AND IRRITATING GASES WITH OXIDES OF CARBON AND INORGANIC FRAGMENTS. TOXIC FUMES AND DARK SMOKE YIELD WHEN BURNT.

PECIAL FIRE FIGHTING PROCEDURE : WEAR SELF CONTAINED BREATING APPARATUS OF EQUIVALENT (MSHA/NIOSH- APPROVED)

UNUSUAL FIRE EXPLOSION HAZARDS : SHEET BURN FAST WITH FLAMES. THERE IS NO EXPLOSION WHILE BURNING.

SECTION # 5 – ACCIDENTAL RELEASE MEASURES OF STONE VENEER

PERSONAL PRECAUTIONS : USE PERSONAL PROTECTIVE EQUIPMENT AND HANDLING WHEN MATERIAL NEEDS TO BE BURNT.

ENVIRONMENT PRECAUTIONS : REVIEW FIRE AND SAFETY PRECAUTIONS BEFORE PROCEEDING WITH CLEAN UP. USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT DURING CLEAN UP. KEEP SPECTATOR AWAY. DIKE AND CONTAIN SPILL WITH SAND AND INSERT (E.G. SAND, EARTH, ETC) ABSORBENT COLLECT THE ABSORBED MATERIAL IN PLASTIC BAG FOR FINAL DISPOSAL.

CLEANING METHODS : WASH FLOOR WITH WATER, CONTAMINATED DIKING MATERIAL MAY BE INCINERATED OR LAND FILLED ACCORDING TO CURRENT LOCAL OR CENTRAL REGULATION.

SECTION # 6 – HANDLING AND STORAGES OF STONE VENEER

HANDLING PROCEDURE: USE APPROPRIATE PERSONAL PROTECTIVE HAND GLOVES DURING HANDLING. PROTECT AGAINST PHYSICAL DAMAGE. OBSERVE GOOD HYGIENE PRACTICES.

STORAGE REQUIREMENT : STORE AT AMBIENT TEMPERATURE. KEEP AWAY FROM FREEZING. KEEP SHEETS STORED AT ROOM TEMPERATURE AWAY FROM FLAMES AND FIRE.

SECTION # 7 – EXPOSER CONTROL / PERSONAL PROTECTIVE EQUIPMENTS DURING STONE VENEER HANDLING AND USE

PERSONAL PROTECTIVE EQUIPMENT: DO NOT DRINK AND SMOKE WHEN WORKING WITH STONE VENEER SHEETS. WASH HANDS BEFORE BREAKS AND AFTER WORK.

EYE PROTECT : IMPERVIOUS (RUBBER, NEOPRENE, PVC, ETC.) HAND GLOVES, APRONS.

RESPIRATION PROTECTION : NONE REQUIRED IF GOOD VENTILATION IN THE AREA IS MAINTAINED.

OTHERS : EYE WASH FACILITY AND EMERGENCY SHOWER.

ENGINEERING CONTROLS : NO SPECIFIC

SECTION # 8 – PHYSICAL AND CHEMICAL PROPERTIES OF STONE VENEER

BURNING TEMPERATURE: (°C) : ABOUT 250-300°C

FLAMMABILITY : COMBUSTIBLE.

EXPLOSIVE LIMITS : (% BY VOL.) LEL : NA UEL : NA FLASH POINT : NA

SECTION # 9 – STABILITY AND REACTIVITY DATA OF STONE VENEER

CHEMICAL STABILITY: STABLE UNDER NORMAL AMBIENT CONDITIONS.

INCOMPATIBILITY: MINERAL ACIDS AND STRONG SALT SOLUTION.

HAZARDOUS POLYMERISATION : WILL OCCUR.

CONDITION TO AVOID : NOT SPECIFIC.

SECTION # 10 – TOXICOLOGICAL INFORMATION OF STONE VENEER

MATERIAL HAS POLYMER CONTENT THE PRODUCT IS NOT A PROBLEM IN NORMAL HANDLING AND STORAGE. HOWEVER POLYMER WHEN HEATED MAY BE RELEASE ACETALDEHYDE INTO WORKROOM ATMOSPHERE WHEN SHEETS ARE HEAT ABOVE 195 DEGREE CENTIGARDE.

SECTION # 11 – ECOLOGICAL INFORMATION OF STONE VENEER

NOT DETERMINED, HOWEVER AS A GENERAL PRACTICE, DO NOT ALLOW PRODUCT TO OVERHEAT FLAME EXPOSER OR EXTREME COLD CLOSE TO SUB ZERO.

SECTION # 12 – TRANSPORTATION INFORMATION OF STONE VENEER

DO INFORMATION : NOT APPLICABLE

TDG INFORMATION : NOT DETERMINED

THE MATERIAL IS NOT CONSIDERED AS DANGEROUS FOR TRANSPORTATION.

SECTION # 13 – MISCELLANEOUS INFORMATION

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