MATERIAL SAFETY DATA SHEET
MSDS

Foamacell TM

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name:	PVC free foam board - Foamacell tm
Production Use:	Advertisement sign, architecture
Representative's Name:	Plastic Engineering Solutions, Inc. 611 Alicia Road Lakeland, FL 33801

PRODUCT SIZE

Standard Dimension	width: 1220 mm length: customer requirement

PHYSICAL & MECHANICAL CHARACTERISTICS

Density:	0.55-0.70 g/cm3
Tensile Strength:	12-20 mpa
Bending Intensity:	12-18 mpa
Bending Elasticity Modulus:	800-900 mpa
Impacting Intensity:	8-15 kj/sqm
Breakage Elongation:	15-20%
Shore Hardness D:	45-50 (D type)
Water Absorption:	not less than 1.5%
Vicar Softening Point:	73-76 degree celsius
Fire Resistance:	self-extinguishing in less than 5 seconds

FIRE SAFETY

Flammability is not applicable.	Self-extinguishing in less than 5 seconds

COMPONENTS AND HAZARD CLASSIFICATION

PVC Polymer:	PVC 100
Insert Filters:	14% CaCO , TiO
Heat Stablilizer:	7.0% Organotin Compounds
Lubricants:	1.8% Calcium Stearate, Parafin, Polyethylene, Polyamide compounds or Esters
Process Aid:	18% Acrylic Compounds
Impact Modifiers:	2.5% CPE, ABS, MBS, or Acrylic Compounds
Colorants:	Organic and inorganic
Chemical Blowing Agents:	1.0% Azo Compounds or Sodium Bicarbonate

This product is an article as defined in 29CFR 1910. 1200. It will not result in exposure to hazardous chemicals under normal conditions of use. This product is not 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.

PHYSICAL DATA

Boiling Point (F):	Solid
Specific Gravity:	H2O = 1
Vapor Pressure (MMHG):	Solid
Melting Point:	Decomposes before melting
Solubility in Water:	Solid
Vapor Density:	Solid
Appearance and Odor:	Finished sheet

FIRE AND EXPLOSION DATA

Flash Point (Test Method):	Not applicable
Autoignition Temperature:	Not applicable
Flammable Limits in Air % by Volume:	Lower: not applicable Upper: not applicable
Extinguishing Media:	Water spray (fog), foam, dry chemical, or CO
Special Fire Fighting Procedures:	Cool exposed equipment with water spray. Use self-contained breathing apparatus if fighting fire in confined spaces.
Unusual Fire and Explosion Hazard:	PVC includes hydrogen chloride, carbon monoxide, and other toxic gases when burned. Exposure to combustion products may be fatal and should be avoided.

HEALTH HAZARD INFORMATION

First Aid

Eyes:	Immediately flush with plenty of water. Call a physician if irritation persists.
Skin:	Flush skin with plenty of water. Remove contaminated clothing. Call a physician if irritation persists. Wash clothing before reuse.
Ingestion:	Seek medical aid.

Nature of Hazard

Eyes:	If exposed to high concentrations of dust, physical irritation of the eyes.
Skin:	This material is not expected to present a hazard to the intact skin. Molten sheet will produce thermal burns.
Ingestion:	No significant health hazard can be reasonably anticipated.
Inhalation:	Under normal conditions and with normal use, no inhalation is presented. Refer to Section IV, Fire and Explosion Data.
Exposure Limits	None Established ACGIH TLV of 10 mg/m³ total dust as an 8-hour TWA is recommended
Toxicity Data	
Skin Contact:	A review of the pertinent literature did not reveal specific information for PVC.
Eye Contact:	A review of the pertinent literature did not reveal specific information for PVC.
Inhalation:	Rodents exposed by the dietary or inhalation route for 6 - 24 months have shown no significant effects. 4 months have shown no significant toxicological effects
Ingestion:	See Above
Special Precautions	Avoid inhalation of combution products

REACTIVITY DATA

Conditions Contributing to Instability:	Not applicable
Incompatibility:	Not applicable
Hazardous Decomposition Products:	Hydrogen chloride and other toxic fumes generated with combustion.
Conditions Contributing to Hazardous Polymerizaton:	Not applicable

SPILL OR LEAK PROCEDURES

When producing chips or dust from fabricating PVC sheets: sweep, scoop, or vacuum to remove. Dispose of only in accordance with local, state and federal regulations

SPECIAL PROTECTION INFORMATION	*Pertains to dust or chips as a by-product of fabricating finished sheet*
Ventilation Recommendations:	General ventilaton when fabricating and nuisance dust control
Specific Personal Protective Equipment	
Respiratory Protection:	If dust is produced during handling, an approved particulate filter respirator should be used.
Eyes:	Safety glasses or goggles
Gloves:	Necessary when handling hot or molten sheets
Other clothing and equipment:	As necessary when handling hot or molten sheets

SHIPPING, TRANSFER, AND STORAGE

Shipping Information:	Non-hazardous for transportation purposes
Transportation and Storage:	Usual shipping containers - palletized sheets
Storage Transport:	Sustained temperatures above 150 F may cause slow degradation.
Electrostatic Accumulation Hazard:	Yes

PROCESSING PERFORMANCE

PVC FF boards are of sound insulation, sound absorption, heat insulation and heat preservation.

It is safe with good fire-retardant
Is moisture proof, mold proof, non-hydroscopic and shock proof
Has long performance life and stable color
With light weight, it is fit for transportation and handling
It is processed the same as wooden material: drilling,sawing,nailing, planing and bonding.
It can be processed in heat-forming, heat bending, and heat folding
It also can be welded and bonded to itself
The surface is very smooth and suitable for printing

APPLICATION

For Advertising and Communication:	Use in printing, engraving by PC, advertising signs
For Transportation:	Variety of boards in vessles, airplanes, and cars
For Architecture and Decoration:	Outside/inside boards for buildings, dividers for buildings, decorative shelves, and ceilings.
For Industrial Purposes:	Anticorrosion in chemical industry, cold storage, and environmental protection.
For Other Fields:	Frame work board, sports equipment, as water-proof material