



# Shivaya Enterprises **PRODUCT** **BROCHURE**

## Product Applications

- Thermal Insulation
- Thermal Packaging
- Automotive Industry Application
- Radiant Barriers & many more

# About Shivaya Enterprises

Welcome to Shivaya Enterprises we are one source for any requirements related To closed cell polyethylene foam insulation products. We're dedicated to give you the best of non cross linked closed cell polyethylene (recyclable foam material) with a focus on energy loss in industry, domestic , automotive and agriculture applications

Founded in 2016 by Sanjay Patil Shivaya Enterprises has come a long way from its beginning in Vadodara, Gujarat, India. When Sanjay Patil first started out, his passion for insulation products with their techno-commercial benefits in industry to prevent heat loss & energy loss in HVAC industry drove them to do tons of research so that Shivaya Enterprises can offer you world's most qualitative insulation products with different reinforcement lamination material as per your requirements. We now serve clients all over the world with world standard quality and are thrilled that we're able to turn our passion into our business.

We hope you enjoy our products as much as we enjoy offering them to you. If you have any questions or comments, please don't hesitate to contact us at any time.



# Our Vision

Our Vision is to become the benchmark manufacturing company for the insulation and packaging industry providing world-class products to satisfy clients through continuous improvement driven by the integrity, teamwork and creativity of our team at Shivaya Enterprises



# Our Approach

**We have been an established and popular company with an excellent track record for the best customer satisfaction.**

**We have never compromised on the quality and the services provided to the customers.**

**We believe in keeping the customers happy and providing them with products at competent price.**

**Please feel free to keep in touch with us about any of our business related requirements.**

**Additionally, we are specialized in radiant barrier (5 - 7 layers) products.**

# Product Details



## Physical Properties of EPE Foam

EPE foam is the harmless plastic and has no taste or odour.

EPE has the high weight to strength ratio and high thermal resistance.

It can be heated and melted multiple times, and reshaped into other new objects due to the high EPE foam temperature range.

EPE foam is resistant to water, oils, and many major chemicals.

It is also a very good insulating material.

EPE is available in different densities, according to its application or purpose.

## **Chemical** **Properties** **of EPE Foam**

1) The chemical makeup of expanded polyethylene is similar to most plastics, and of the form  $(C_2H_4)_nH_2$ .

2) EPE is usually white in colour unless a dye or other colour pigment is added to it during the melting process.

## Closed cell polyethylene foam insulation

- ◆ This product is very environment friendly along with having good heat safeguarding and insulation properties.
- ❖ The outer layer of PET works to provide excellent abrading and tears resistance.
- The middle layer of AL/ EPE (closed cell non cross linked polyethylene foam, recyclable material) shows strong ability in barricade of moisture.
- ◆ This industrial insulation roll with EPE foam is the highest quality material for warm-keeping and energy-saving, it is also the killer of dew forming and the transmission of cold and heat.
- ◇ This thing insulates any heat media with a stable and low thermal conductivity.
- ◇ It s light in weight and It could also absorb sound, reduce noise, and provide cushioning function.
- ◆ This insulation foam sheet is water and leak proof, anti-flaming, easy to be processed and installed. It s extremely durable in use and endurable to heat, cold and chemical reaction

3) EPE foam is also referred to as bead board in the plastic industry.

4) It is a closed cell foam, which allows it to take up more volume and be light weight.

## OUR PRODUCT APPLICATIONS

1.



### 1) Thermal Insulation for Internal/ External Application

- Thermal insulation for internal application comes as Closed Cell Polyethylene foam laminated with metalized foil, aluminum foil and AluPET.
- Foil with different combination and customisable as per your requirements are available.
- Moreover we are able to supply one side adhesive which are too easy to apply (DIY).
- Thermal Insulation for external application comes as Closed Cell Polyethylene foam laminated with Glass cloth and
- Ultra Clad foil provides with extra mechanical strength to the product.

2.

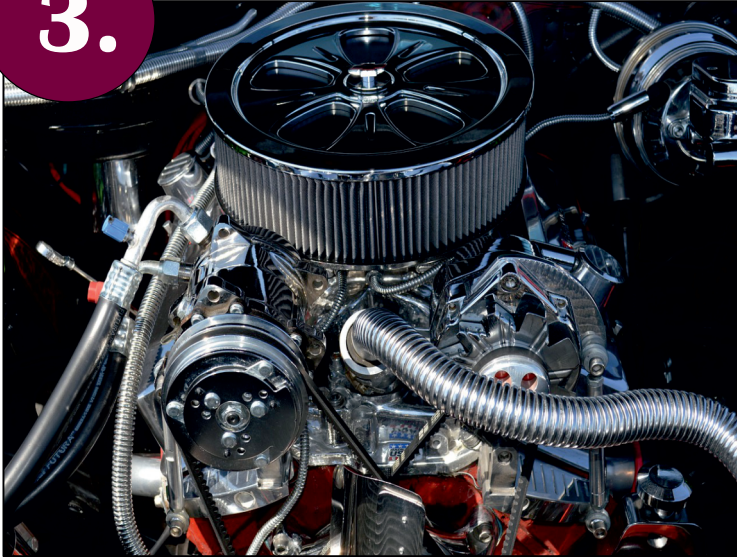


### 2) Thermal Packaging Applications

- At Shivaya Enterprise our Foam Packaging Team has developed two products for the packaging application.
- The first one is laminated with 140 GSM brown paper to apply with craft box.
- Second product is laminated with woven fabric to apply with FIBC bags or small woven sack bags.

## OUR PRODUCT APPLICATIONS

3.



### 3) Automobiles, Construction & Sports.

- In Automobiles this is used for roof tops, engines, bonnets, driver cabin insulation, door panels, seat linings, floor mats, carpet underlay, upholstery, sun visors and AC insulation.
- For Construction purpose it is used for expansion joint fillers, water proofing of terraces/roofs, foundation wraps, sound barrier underlay, false ceilings and structural glazing.
- The sports goods use this material for wrestling, judo, gymnastics, taekwondo, jogging exercise mats, leg and thigh guards, arm/elbow/shoulder pads, helmets, sleeping bags, ski belts, life saving jackets and glove hand costume insulation.

4.



### 4) Radiant Barrier Application

- Our Very Talented R&D Team at Shivaya enterprises has developed two super efficient Radiant Barrier materials for application
- The first is Shivaya Enterprises is made up with nontoxic polypropylene nonwoven fabric laminated both side with highly reflective non corrosive pure aluminium foil.
- The other is Shivaya Enterprises is made up with nontoxic HDPE woven fabric laminated both side with highly reflective non corrosive pure aluminium foil
- Applicable in Packaging Industry & Container Line

# How Shivaya Insulation Materials Are Different From Others!



<u>Properties</u>	<u>Traditional Insulation Material</u>	<u>Shivaya Insulation Material</u>
Cost Efficiency	Single or both side Pure Aluminum Foil insulations price are higher due to bulky low production and transport cost. Fixing cost and time are higher as per building requirements.	Best and low cost material in present time from all kind of application with pure aluminium foils. Always low fixing cost with highest speed of installation in any kind or building at any level
Reflectivity	Due to absorption the Reflection capacity decreases year to year.	97% Reflectivity not absorbing & blocks the moisture and heat.
Emissivity	Traditional insulation absorb the moisture & heat	3% emissivity not absorbing & blocks the moisture and heat.
Product Dimension	For thermal insulation always higher in thickness & available standard size and Shapes bulky material.	Low in thickness, light weight, flexible & available in customization as per building requirements.
Installation Process	Always Require cost ads for other installation item like weld mesh, fasteners, adhesive, Tapes & other item for installation and require professional labours.	Easy and fast installation by using simple process no expensive items required Easy Installation by any roofing fabricator, contractor and erector.
Other Parameter	Mostly not free by dust, fiber, corrosion shrinkage & chemically reacted.	It is humidity and vapor barrier with free to shrinkage, corrosion, fiber, and dust and chemically none reacted.



# Product Dimensions

Perfectly Crafted Products to endure  
all your needs



## Insulation Rolls Dimension

Sr. No.	Thickness (mm)	Thickness Tolerance (mm)	Width (mtr) (Tol: $\pm 0.02m$ )	Length (mtr) (Tol: $+0.5m/-0.2m$ )	Total SQM
1.	2	$\pm 0.5$	1.2m	200	240
2.	3	$\pm 0.5$	1.2m	150	180
3.	4	$\pm 0.5$	1.2m	100	120
4.	5	$\pm 0.5$	1.2m	80	96
5.	6	$\pm 0.6$	1.2m	70	84
6.	8	$(-1.0/+1.0)$	1.2m	50	60
7.	10	$(-1.0/+1.0)$	1.2m	40	48
8.	12	$(-1.0/+1.0)$	1.2m	35	42
9.	25	$+1.5$	1.2m	16	19.2

Note : Double sided laminated material have extra tolerances (- 0.5 mm)



# TECHNICAL SPECIFICATIONS

## Parameter

## EPE Specification

<b>Material</b>	<b>Expanded Polyethylene Foam Insulation</b>
Temperature Range	400C to +900C
Nominal Density	25 ± 5 Kg/m <sup>3</sup>
Thermal Conductivity	0.0389 W/m 0K
Reaction to Fire	Self Extinguishing, Non-toxic Ozone
Dimensional Stability: BS 4370 Part 1	Change in Dimensions at -200C for 4 hrs: <0.6% and at 1100C for 4 hrs: <0.6%
Limiting Oxygen Index: ASTM D 2863	24%
Compression Strenght@25%:	11 psi
Tensile Strength: ASTM D 3575	45%
Elongation to Break: ASTM D 3575	30 lbs/in
Buoyancy ASTM-D3575	59.5 pcf
Fungal Resistance: ASTM G 21	No Growth observed
Volume % of Closed cells: ASTM 4370 Part 2	>90%
Sound Transmission ASTM E 413/ ISO 140	40 dB
"Water Absorption: ASTM D3575(without Paper)"	<0.2%
Health & Safety Aspects	CFC/HCFC Free; Dust and Fiber free, VOC/SVOC Free
Emission of Volatile Organic Compound(VOC)	Negligible
Emissivity	3%

# Why Choose Shivaya

**Get the highest quality insulation materials for multiple applications**

**5+**  
Year of  
Experience

**100%**  
Client  
Satisfaction



**All the application products at single place including Thermal Packaging, Thermal Insulation for Internal & External use, Automotive industry application, Radiant Barrier and more.**

**Cost effective and aggressively praised products.**

**Get the highest quality insulation materials for multiple applications**

**THANK YOU.**  
**For Checking out our Brochure**

**Please check our samples attached**



**ISO 9001 Certified  
Insulation Materials  
Manufacturers since 2015**



**B-603, SIDDHESHWAR HILLSTONE,  
NR DWARKA NAGARI SOCIETY,  
Vadodara, Vadodara, Gujarat, 390019.**



**+91 7069108730**



**info@shivayaenterprises.com**



**www.shivayaenterprises.com**