

# **EPD Transparency Summary**

**COMPANY NAME EPS Industry Alliance** 

PRODUCT NAME **Rigid Thermal Insulation** 

PRODUCT DESCRIPTION EPS insulation is a versatile molded closed-cell foam plastic insulation

> that provides long-term stable R-value. EPS has a high level of moisture resistance and meets the most demanding compressive

and thermal resistance building requirements.

PRODUCT CATEGORY RULE (PCR) + VERSION

PCR Part B: Building Envelope Thermal Insulation EPD Requirements,

UL Environment, UL 10010-1, April 2018, version 2.0

**CERTIFICATION PERIOD** 2023-2028

4790678084.101.1 **DECLARATION NUMBER** 

**Industry Average EPD TYPE** 

DECLARED/FUNCTIONAL

UNIT

1 m<sup>2</sup> of insulation with a thickness that yields RSI=1mK/w

**GREEN BUILDING** 

LEED v4 Building Product Disclosure and Optimization - EPDs, QUALIFICATIONS Option 1 LEED v4.1 Environmental

Multi-attribute product declarations, Product Declarations, Option 1 901.4.1.4.1

REFERENCE SERVICE LIFE (IF APPLICABLE)

75 Years

LCA SOFTWARE + VERSION

SimaPro v9.4

**IMPACT ASSESSMENT** METHOD + VERSION

TRACI v2.1 & CML-IA v4.7



#### LIFECYCLE IMPACT CATEGORIES

The environmental impacts listed below were assessed throughout the product's lifecycle.

ATMOSPHERE			W.	ATER	EARTH		
	Global Warming Potential refers to long-term changes in global weather patterns –including temperature and precipitation— that are caused by increased concentrations of	Ozone Depletion Potential is the destruction of the stratospheric ozone layer, which shields the earth from ultraviolet radiation that's harmful to life, causedby human-made air pollution.	Photochemical Ozone Creation Potential happens when sunlight reacts with hydrocarbons, nitrogen oxides, and volatile organic compounds, to produce a typeof air pollution known as smog.	Acidification Potential is the result of human-made emissions and refers to the decrease in pH and increase in acidity of oceans, lakes, rivers, and streams – a phenomenon that pollutes groundwater and harms aquatic life.	Eutrophication Potential occurs when excessive nutrients cause increased algae growth in lakes, blocking the underwater penetration of sunlight needed to produce oxygen and resulting in	Depletion of Abiotic Resources (Elements) refers to the reduction of available non-renewable resources, such as metals and gases, that are found on the periodic table of elements, due to human activity.	Depletion of Abiotic Resources (Fossil Fuels) refers to the decreasing availability of non- renewable carbon- based compounds, such as oil and coal, due to human activity.
TRACI	greenhouse gases in the atmosphere.  2.64E+00	2.35E-07	1.48E-01	8.86E-03	the loss of aquatic life.  4.13E-03 kg N eq.	N/A	5.96E+01
	kg CO₂ eq. 2.61E+00	kg CFC-11 eq. 1.89E-07	kg 0₃ eq. 9.45E-03	kg SO <sub>2</sub> eq. 8.77E-03	2.24E-03	8.71E-06	MJ, LHV 5.96E+01
CML	kg CO₂ eq.	kg CFC-11 eq.	kg ethene eq.	kg SO₂ eq.	kg PO₄ <sup>-3</sup> eq.	kg Sb eq.	MJ, LHV

Green Globes v1.0 Product Life Cycle

IgCC 2021 Material Compliance -





# **Environment**

#### **MATERIAL CONTENT**

Material content measured to 1%.

COMPONENT	MATERIAL	AVAILABILITY	MASS%	ORIGIN	
	EPS Resin	Non-renewable	93	North America	
	Recycled EPS Regrind	Recycled Material	4	North America	
	Laminating Films	Non-renewable	2-3	North America	
	Flame Retardant	Non-renewable	<1	Global	

## ADDITIONAL ENVIRONMENTAL INFORMATION

PRE-CONSUMER RECYCLED CONTENT	3-4	%	
POST-CONSUMER RECYCLED CONTENT	0-1		
VOC EMISSIONS	1715 μg/m³		
WATER CONSUMPTION	2.54E-02 m <sup>3</sup>		

#### **ENERGY**

RENEWABLE ENERGY	1.4	%	9.75E-01	MJ
NON-RENEWABLE ENERGY	98.6	%	6.67E+01	MJ

## **MANUFACTURER CONTACTINFO**

NAME	EPS Industry Alliance	
PHONE	800-607-3772	
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WEBSITE	www.epsindustry.org	

### **RECYCLING OR REUSE**

Recycling has always been an integral part of operations at EPS processing plants. Cutting scrap is recycled and incorporated into the production cycle to make new EPS insulation, and many manufacturers also include post-consumer recycled material. In addition to insulation, recycled EPS can be processed into new products such as plastic lumber.

#### **STANDARDS**

ASTM C578 ASTM E84 CAN/ULC S701.1 CAN/ULC S102.2

## **CERTIFICATIONS**

www.UL.com/environment | environment@ul.com