



# EPD Transparency Summary

|   |   |  |
|---|---|--|
| <b>COMPANY NAME</b>                           | EPS Industry Alliance   |  |
| <b>PRODUCT NAME</b>                           | Rigid Thermal Insulation  |  |
| <b>PRODUCT DESCRIPTION</b>                    | 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. |  |
| <b>PRODUCT CATEGORY RULE (PCR) + VERSION</b>  | PCR Part B: Building Envelope Thermal Insulation EPD Requirements, UL Environment, UL 10010-1, April 2018, version 2.0  |  |
| <b>CERTIFICATION PERIOD</b>                   | 2023-2028   |  |
| <b>DECLARATION NUMBER</b>                     | 4790678084.101.1  |  |
| <b>EPD TYPE</b>                               | Industry Average  |  |
| <b>DECLARED/FUNCTIONAL UNIT</b>               | 1 m <sup>2</sup> of insulation with a thickness that yields RSI=1m <sup>2</sup> K/w   |  |
| <b>GREEN BUILDING QUALIFICATIONS</b>          | LEED v4 Building Product Disclosure and Optimization - EPDs, Option 1 LEED v4.1 Environmental Product Declarations, Option 1  | Green Globes v1.0 Product Life Cycle IgCC 2021 Material Compliance - Multi-attribute product declarations, 901.4.1.4.1 |
| <b>REFERENCE SERVICE LIFE (IF APPLICABLE)</b> | 75 Years  |  |
| <b>LCA SOFTWARE + VERSION</b>                 | SimaPro v9.4  |  |
| <b>IMPACT ASSESSMENT METHOD + VERSION</b>     | TRACI v2.1 & CML-IA v4.7  |  |



## LIFECYCLE IMPACT CATEGORIES

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

|              | ATMOSPHERE   |  |  | WATER  |  | EARTH   |  |
|--------------|--|--|--|--|--|---|--|
|              |  |  |  |  |  |   |  |
|              | <b>Global Warming Potential</b> refers to long-term changes in global weather patterns –including temperature and precipitation – that are caused by increased concentrations of greenhouse gases in the atmosphere. | <b>Ozone Depletion Potential</b> is the destruction of the stratospheric ozone layer, which shields the earth from ultraviolet radiation that's harmful to life, caused by human-made air pollution. | <b>Photochemical Ozone Creation Potential</b> happens when sunlight reacts with hydrocarbons, nitrogen oxides, and volatile organic compounds, to produce a type of air pollution known as smog. | <b>Acidification Potential</b> 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. | <b>Eutrophication Potential</b> occurs when excessive nutrients cause increased algae growth in lakes, blocking the underwater penetration of sunlight needed to produce oxygen and resulting in the loss of aquatic life. | <b>Depletion of Abiotic Resources (Elements)</b> 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. | <b>Depletion of Abiotic Resources (Fossil Fuels)</b> refers to the decreasing availability of non-renewable carbon-based compounds, such as oil and coal, due to human activity. |
| <b>TRACI</b> | 2.64E+00<br>kg CO <sub>2</sub> eq.   | 2.35E-07<br>kg CFC-11 eq.  | 1.48E-01<br>kg O <sub>3</sub> eq.  | 8.86E-03<br>kg SO <sub>2</sub> eq.   | 4.13E-03<br>kg N eq.   | N/A   | 5.96E+01<br>MJ, LHV  |
| <b>CML</b>   | 2.61E+00<br>kg CO <sub>2</sub> eq.   | 1.89E-07<br>kg CFC-11 eq.  | 9.45E-03<br>kg ethene eq.  | 8.77E-03<br>kg SO <sub>2</sub> eq.   | 2.24E-03<br>kg PO <sub>4</sub> <sup>-3</sup> eq.   | 8.71E-06<br>kg Sb eq.   | 5.96E+01<br>MJ, LHV  |





## 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/m <sup>3</sup>  |   |
| 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 CONTACT INFO

|         |                       |
|---------|-----------------------|
| NAME    | EPS Industry Alliance |
| PHONE   | 800-607-3772          |
| EMAIL   | info@epsindustry.org  |
| 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