

kg Polyurethane (PU) rigid foam insulation

Polyurethane (PU) is a polymer with a low density, low thermal conductivity and high durability.

PU is produced by mixing a stream of isocyanate and a stream of polyol, including any other additives. The proportion of each stream in the mix is often used to alter the material properties. The resulting mixture is poured into a mould or onto a surface. Once cured, the PU is demoulded.

PU insulation consists of rigid foam panels that are used for high-performance insulation.

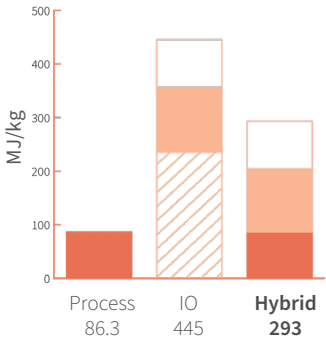
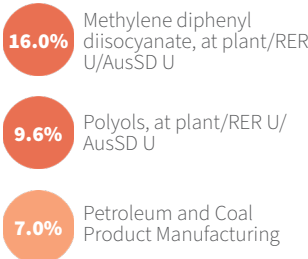
Category *Insulation*
Type *Polyurethane*
Functional unit *kg*
Specific heat *1 800 J/(kg·K)*
Density *30 kg/m³*

Common uses
Insulation
Process name
Polyurethane, rigid foam, at plant/RER U/AusSD U
Input-output sector
Polymer Product Manufacturing
Further information
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Material variations

	Unit	Energy (MJ/unit)	Water (L/unit)	GHG emissions (kgCO ₂ e/unit)
<i>Polyurethane (PU) rigid foam insulation</i>	kg	293	690	17.5
PU rigid foam insulation - 44 mm (R2)	m ²	387	911	23.1
PU rigid foam insulation - 55 mm (R2.5)	m ²	484	1 138	28.8

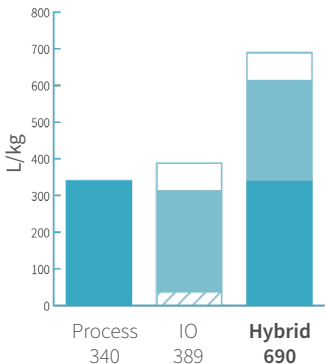
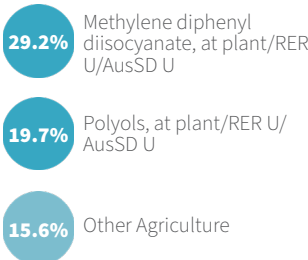
TOP THREE INPUTS



ENERGY



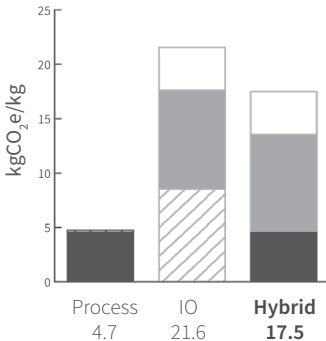
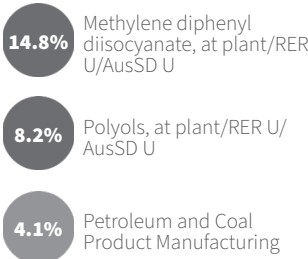
TOP THREE INPUTS



WATER



TOP THREE INPUTS



GREENHOUSE GAS EMISSIONS

