

## kg Synthetic rubber

Rubber is a highly elastic polymer (elastomer) that can be obtained naturally, or produced synthetically using oil-based production methods. It has a high tensile strength, resistance to fatigue and tearing, abrasion resistance and a high resilience/ability to return to its original shape and size. In addition to this, it has good insulative qualities and adheres well to itself and other materials.

There are many different types of synthetic rubber. Most are synthesised from petroleum by-products. Some are produced with distinctive properties or qualities for specific products.

In comparison with natural rubber, synthetic rubber is generally tolerant to a broader range of temperatures, is resistant to oil and grease, and ages well against weathering. Natural rubber is favoured for its high performance and low cost, which is not directly tied to the price of petroleum.

**Category** Miscellaneous

**Type** Rubber

**Functional unit** kg

**Specific heat** 2 010 J/(kg·K)

**Density** 1 100 kg/m<sup>3</sup>

### Common uses

*Expansion joints, window and building seals, flooring, fittings*

### Process name

*Synthetic rubber, at plant/RER U/AusSD U*

### Input-output sector

*Polymer Product Manufacturing*

### Further information

[doi.org/10.26188/5da558867e249](https://doi.org/10.26188/5da558867e249)

### TOP THREE INPUTS

**30.2%** Carbon black, at plant/  
GLO U/AusSD U

**6.4%** Extrusion, plastic pipes/  
RER U/AusSD U

**1.6%** Road Transport

### TOP THREE INPUTS

**18.6%** Extrusion, plastic pipes/  
RER U/AusSD U

**11.5%** Other Agriculture

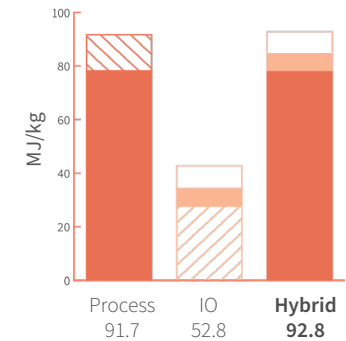
**2.5%** Carbon black, at plant/  
GLO U/AusSD U

### TOP THREE INPUTS

**19.5%** Carbon black, at plant/  
GLO U/AusSD U

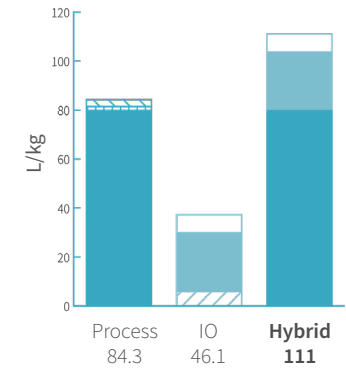
**14.2%** Extrusion, plastic pipes/  
RER U/AusSD U

**1.5%** Wholesale Trade



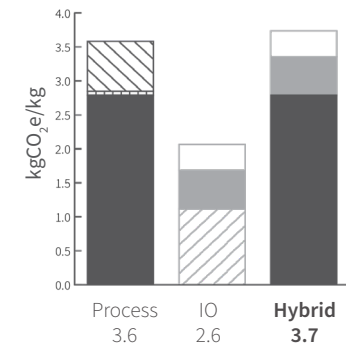
### ENERGY

**92.8**  
MJ/kg



### WATER

**111**  
L/kg



### GREENHOUSE GAS EMISSIONS

**3.7**  
kgCO<sub>2</sub>e/kg