

# Environmental Product Declaration

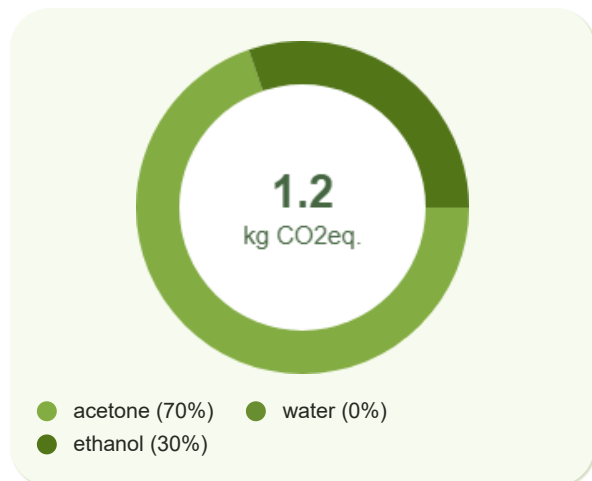
FOR 1 kg of: **Roundup UltraMAX Herbicide**  
Manufactured by:

This Environmental Product Declaration is based on third-party verified results.  
It involves a cradle-to-gate (A1-A3) life-cycle assessment of the product's ingredients. **100%** of ingredients are accounted for.

## Ingredients

| Ingredient Name | Cas Number | % w/w Proportion |
|-----------------|------------|------------------|
| <b>acetone</b>  | 67-64-1    | 51               |
| <b>water</b>    | 7732-18-5  | 30               |
| <b>ethanol</b>  | 64-17-5    | 19               |

## Life Cycle Inventory Assessment Results



| Parameter                          | Units                  | Total (A1-A3)          |
|------------------------------------|------------------------|------------------------|
| Climate Change <b>Fossil Fuels</b> | kg·CO <sub>2</sub> .eq | 1.2                    |
| Climate Change <b>Biogenic</b>     | kg·CO <sub>2</sub> .eq | 0.0012                 |
| Climate Change <b>Land Use</b>     | kg·CO <sub>2</sub> .eq | 5.1 × 10 <sup>-4</sup> |
| Climate Change <b>Total</b>        | kg·CO <sub>2</sub> .eq | <b>1.2</b>             |

## Climate Change Rating



| Parameter                           | Units                    | Total (A1-A3)          |
|-------------------------------------|--------------------------|------------------------|
| Acidification                       | mol·H <sup>+</sup> .eq   | 0.006                  |
| <b>Eutrofication</b> Freshwater     | kg-P.eq                  | 4.3 × 10 <sup>-4</sup> |
| <b>Eutrofication</b> Marine         | kg-N.eq                  | 0.0011                 |
| <b>Eutrofication</b> Terrestrial    | mol-N.eq                 | 0.012                  |
| Photochemical Ozone Creation        | kg·NMVOC.eq              | 0.0056                 |
| Ozone Depletion                     | kg·CFC·11.eq             | 1.0 × 10 <sup>-8</sup> |
| Abiotic Material Resource Depletion | kg·Sb.eq                 | 5.8 × 10 <sup>-6</sup> |
| Abiotic Energy Resource Depletion   | MJ                       | 30                     |
| Deprivation-Weighted Water Use      | m <sup>3</sup> ·world.eq | 0.52                   |

| Parameter                                     |                   | Total (A1-A3) |
|---|-------------------|---------------|
| Primary Energy Resources — Renewable (MJ)     | As Energy Carrier | 0.44          |
|   | As Raw Material   | 0             |
|   | Total             | 0.44          |
| Primary Energy Resources — Non-Renewable (MJ) | As Energy Carrier | 30            |

| Parameter | As Raw Material | Total (A1-A3) |
|-----------|-----------------|---------------|
|           | <b>Total</b>    | <b>51</b>     |

| Parameter                    | Units | Total (A1-A3)        |
|------------------------------|-------|----------------------|
| Hazardous Waste Disposed     | kg    | $1.8 \times 10^{-5}$ |
| Non-hazardous Waste Disposed | kg    | 0.11                 |
| Radioactive Waste Disposed   | kg    | $6.0 \times 10^{-6}$ |

Contact Information

### Key Assumptions for EPD

**INGREDIENTS**  
All upstream sourced. Impacts from global averages (calculated from peer-reviewed LCA databases)

**PACKAGING**  
Excluded

**PRINCIPLE**  
Polluter-pays

**MANUFACTURING**  
Blending only, negligible impact

**METHODOLOGIES**  
EF v3.1, CED, EDIP 2003 (in Tables 2, 3, 4 respectively)

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Page 2 of 2  
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