Inventory data

Table 1. Fishing net manufacturing inventory (Karadurmuş and Bilgili, 2024)

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Parameter in SimaPro** | **Amount** | **Unit** |
| Polyamide | Nylon 6-6 {RER}| market for nylon 6-6 | Cut-off, U | 0.89 | t |
| Polyethylene | Polyethylene, high density, granulate {GLO}| market for polyethylene, high density, granulate | Cut-off, U | 0.06 | t |
| Polypropylene | Polypropylene, granulate {GLO}| market for polypropylene, granulate | Cut-off, U | 0.05 | t |
| Paint | Solvent for paint {GLO}| market for solvent for paint | Cut-off, U | 0.03 | t |
| Acid | Adipic acid {GLO}| market for adipic acid | Cut-off, U | 0.01 | t |
| Binder | Acrylic binder, with water, in 54% solution state {RER}| market for acrylic binder, with water, in 54% solution state | Cut-off, U | 0.01 | t |
| Electricity | Electricity, medium voltage {LV}| market for electricity, medium voltage | Cut-off, U | 1104 | kWh |
| Water | Tap water {Europe without Switzerland}| market for tap water | Cut-off, U | 7.64 | t |
| Diesel | Diesel {Europe without Switzerland}| market for diesel | Cut-off, U | 0.004 | t |
| Charcoal | Charcoal {GLO}| market for charcoal | Cut-off, U | 0.24 | t |
| Mineral oil | Lubricating oil {RER}| market for lubricating oil | Cut-off, U | 0.001 | t |
| Sack (polypropylene) | Nylon 6 {RER}| market for nylon 6 | Cut-off, U | 0.000345 | t |
| Transport | Transport, freight, lorry 16-32 metric ton, EURO6 {RER}| market for transport, freight, lorry 16-32 metric ton, EURO6 | Cut-off, U | 100 | tkm |

Table 2. End-of-life stage inventory data for fishing net waste management scenarios (Schneider *et al.*, 2023)

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Parameter in SimaPro** | **Value** | **Unit** |
| ***Pre-treatment*** |  |  |  |
| Sorting, shredding, washing and drying | Electricity, medium voltage {LV}| market for electricity, medium voltage | Cut-off, U | 502260 | Wh |
| ***Waste management*** |  |  |  |
| **S1**Avoided product | Nylon 6-6 {RER}| market for nylon 6-6 | Cut-off, U | 1 | t |
| **S2**Avoided product | Bitumen adhesive compound, hot {GLO}| market for bitumen adhesive compound, hot | Cut-off, U | 1 | t |
| **S3**Avoided product | Synthetic gas {RoW}| market for synthetic gas | Cut-off, U | 460 | m3 |
| **S4**Waste treatment | Municipal solid waste (waste scenario) {Europe without Switzerland}| Treatment of municipal solid waste, landfill | Cut-off, U | 1 | t |