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# Environmental report

## „MRP-C 13 (01)“

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# 1 Life Cycle Assessment „HILTI\_MRP-C 13\_01“

## 1.1 Technical data and material distribution

Table 1.1: Technical data and material distribution

IT- Number	Product name	Pcs. per salespack	Weight [kg]	Material
2408031	MRP-C 13/10	50	2,8332	Steel, Polymer, Cardboard
2408032	MRP-C 13/12	50	3,0950	Steel, Polymer, Cardboard
2408033	MRP-C 13/14	50	3,1120	Steel, Polymer, Cardboard
2408034	MRP-C 13/15	50	3,1295	Steel, Polymer, Cardboard
2408035	MRP-C 13/16	50	3,1385	Steel, Polymer, Cardboard
2408036	MRP-C 13/17	50	3,1545	Steel, Polymer, Cardboard
2408037	MRP-C 13/18	50	3,6905	Steel, Polymer, Cardboard
2408038	MRP-C 13/20	50	3,7090	Steel, Polymer, Cardboard
2408039	MRP-C 13/21	50	3,7240	Steel, Polymer, Cardboard
2408130	MRP-C 13/22	50	3,7320	Steel, Polymer, Cardboard
2408131	MRP-C 13/25	50	3,7665	Steel, Polymer, Cardboard
2408132	MRP-C 13/26	50	4,0285	Steel, Polymer, Cardboard
2408133	MRP-C 13/28	50	4,0410	Steel, Polymer, Cardboard
2408134	MRP-C 13/32	50	4,0870	Steel, Polymer, Cardboard
2408135	MRP-C 13/33	20	1,7936	Steel, Polymer, Cardboard
2408136	MRP-C 13/35	20	1,8302	Steel, Polymer, Cardboard
2408137	MRP-C 13/40	20	1,9524	Steel, Polymer, Cardboard
2408138	MRP-C 13/42	20	1,9648	Steel, Polymer, Cardboard
2408139	MRP-C 13/48	20	3,2978	Steel, Polymer, Cardboard
2408140	MRP-C 13/50	20	3,3066	Steel, Polymer, Cardboard

IT- Number	Product name	Pcs. per salespack	Weight [kg]	Material
2408141	MRP-C 13/54	20	3,3274	Steel, Polymer, Cardboard
2408142	MRP-C 13/57	20	3,5562	Steel, Polymer, Cardboard
2408143	MRP-C 13/60	20	4,1300	Steel, Polymer, Cardboard
2408144	MRP-C 13/63	20	4,1306	Steel, Polymer, Cardboard
2408145	MRP-C 13/64	20	4,1370	Steel, Polymer, Cardboard
2408146	MRP-C 13/66	20	4,3922	Steel, Polymer, Cardboard
2408147	MRP-C 13/75	20	4,9604	Steel, Polymer, Cardboard
2408148	MRP-C 13/76	20	4,9464	Steel, Polymer, Cardboard
2408149	MRP-C 13/88	10	3,1378	Steel, Polymer, Cardboard
2408150	MRP-C 13/90	10	3,1258	Steel, Polymer, Cardboard
2408151	MRP-C 13/108	10	3,9105	Steel, Polymer, Cardboard
2408152	MRP-C 13/110	10	4,1679	Steel, Polymer, Cardboard
2408153	MRP-C 13/114	10	4,2031	Steel, Polymer, Cardboard
2408154	MRP-C 13/125	10	4,3181	Steel, Polymer, Cardboard
2408155	MRP-C 13/133	10	4,5893	Steel, Polymer, Cardboard
2408156	MRP-C 13/140	10	4,7406	Steel, Polymer, Cardboard
2408157	MRP-C 13/160	10	7,2113	Steel, Polymer, Cardboard
2408158	MRP-C 13/168	6	4,6983	Steel, Polymer, Cardboard

## 1.2 Description of the applied method

A life cycle assessment according to DIN EN ISO 14040/44, was performed on a product of HILTI AG (MRP C 13 (01)), which considers the entire life cycle of the product (cradle to grave). The accounting data come from the source: Sphera LCA for Experts, and are evaluated from IPCC 2001, August 2016.

The entire life cycle of the product is divided into the following stages:

- Raw material acquisition,
- Transport to production,
- Production,
- Transport to consumer,
- Use,
- End of life.

The data for the raw material acquisition of the product is provided by HILTI AG in a specific data collection form.

The “Transportation” scenario is based on the Limit Stretch of the EPTA study published by Sphera and is evaluated according to the weight of the product. The transport to production reflects the distances, which are essential for bringing together the individual components (by sea- a container ship for 16 800 km for 30% of the product weight, by road- a truck for 4 716 km for 70% of the product weight).

Each material is assigned component specific to one or more manufacturing processes to describe the production process as precisely as possible.

The transport to consumer reflects the distribution of the product to the various sales companies within the EU (2 300 km by road in a truck for 100% of the product weight).

The products produce no emissions in the “Use” phase.

In the “End of life” it is assumed, that the entire product is first fed to a reduction process. A Shredder (QZ 1600 HD) from MeWa, is used for separating and crushing the individual materials. The respective credits come from the material recycling of metals, as well as from the energy recovery of the paper and the polymers.

## 1.3 Life Cycle Assessment

### 1.3.1 MRP-C 13/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408031	MRP-C 13/10	50	2,8332	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	4,482	5,330	0,866	0,889	0,497	0,000	-3,099
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,34E-11	9,48E-12	1,08E-13	1,89E-11	6,70E-14	0,000	-5,08E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,16E-02	1,02E-02	5,76E-03	1,84E-03	1,13E-03	0,000	-7,40E-03
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	1,77E-03	1,28E-03	8,10E-04	2,15E-04	2,68E-04	0,000	-7,97E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,07E-04	1,80E-03	-3,43E-04	1,32E-04	-3,96E-04	0,000	-1,30E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,15E-06	1,90E-06	1,14E-08	1,87E-07	6,81E-09	0,000	4,57E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	5,79E+01	6,63E+01	1,18E+01	1,05E+01	6,91E+00	0,000	-3,76E+01
Energy (net calorific value) [MJ]	6,63E+01	6,79E+01	1,18E+01	1,87E+01	6,95E+00	0,000	-3,91E+01
Energy ren. (net calorific value) [MJ]	1,76E+01	9,69E+00	7,23E-02	1,09E+01	4,47E-02	0,000	-3,17E+00
Water consumption [kg]	1,87E+01	1,29E+01	8,53E-02	8,88E+00	5,19E-02	0,000	-3,24E+00
Air pollution [m <sup>3</sup> ]	2,89E+02	5,95E+02	5,98E+01	6,78E+01	2,37E+01	0,000	-4,57E+02
Water pollution [m <sup>3</sup> ]	8,92E-01	6,90E-01	6,84E-02	2,71E-01	4,06E-02	0,000	-1,77E-01
Hazardous waste for disposal [kg]	1,75E-07	1,76E-07	2,43E-11	-1,39E-09	1,28E-11	0,000	3,73E-10
Disposed of non-hazardous waste [kg]	1,37E-01	7,71E-02	1,16E-03	1,35E-02	6,92E-04	0,000	4,50E-02
Disposed of radioactive waste [kg]	2,96E-03	5,77E-04	1,88E-05	2,90E-03	1,16E-05	0,000	-5,48E-04

evaluated from CML 2001, August 2016

### 1.3.2 MRP-C 13/12

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408032	MRP-C 13/12	50	3,0950	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	4,868	5,876	0,946	0,978	0,543	0,000	-3,476
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,57E-11	1,02E-11	1,18E-13	2,08E-11	7,32E-14	0,000	-5,40E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,26E-02	1,12E-02	6,30E-03	2,03E-03	1,23E-03	0,000	-8,18E-03
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	1,92E-03	1,39E-03	8,85E-04	2,36E-04	2,93E-04	0,000	-8,80E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,19E-04	1,98E-03	-3,75E-04	1,45E-04	-4,33E-04	0,000	-1,44E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,30E-06	2,02E-06	1,24E-08	2,06E-07	7,43E-09	0,000	5,00E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	6,27E+01	7,20E+01	1,29E+01	1,16E+01	7,55E+00	0,000	-4,12E+01
Energy (net calorific value) [MJ]	7,20E+01	7,37E+01	1,29E+01	2,06E+01	7,59E+00	0,000	-4,28E+01
Energy ren. (net calorific value) [MJ]	1,88E+01	1,01E+01	7,90E-02	1,20E+01	4,88E-02	0,000	-3,38E+00
Water consumption [kg]	2,01E+01	1,38E+01	9,32E-02	9,77E+00	5,67E-02	0,000	-3,66E+00
Air pollution [m <sup>3</sup> ]	3,16E+02	6,55E+02	6,53E+01	7,46E+01	2,59E+01	0,000	-5,05E+02
Water pollution [m <sup>3</sup> ]	9,54E-01	7,31E-01	7,47E-02	2,98E-01	4,44E-02	0,000	-1,95E-01
Hazardous waste for disposal [kg]	1,81E-07	1,82E-07	2,65E-11	-1,53E-09	1,40E-11	0,000	4,44E-10
Disposed of non-hazardous waste [kg]	1,45E-01	8,41E-02	1,27E-03	1,48E-02	7,56E-04	0,000	4,44E-02
Disposed of radioactive waste [kg]	3,27E-03	6,17E-04	2,06E-05	3,20E-03	1,26E-05	0,000	-5,72E-04

evaluated from CML 2001, August 2016



### 1.3.3 MRP-C 13/14

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408033	MRP-C 13/14	50	3,1120	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	4,953	5,924	0,951	0,985	0,546	0,000	-3,453
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,60E-11	1,05E-11	1,19E-13	2,09E-11	7,36E-14	0,000	-5,51E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,27E-02	1,13E-02	6,33E-03	2,04E-03	1,24E-03	0,000	-8,18E-03
Eutrophication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> -eq.]	1,94E-03	1,40E-03	8,90E-04	2,38E-04	2,94E-04	0,000	-8,80E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,10E-04	1,99E-03	-3,77E-04	1,46E-04	-4,35E-04	0,000	-1,44E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,41E-06	2,13E-06	1,25E-08	2,08E-07	7,48E-09	0,000	5,08E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	6,40E+01	7,32E+01	1,29E+01	1,16E+01	7,59E+00	0,000	-4,14E+01
Energy (net calorific value) [MJ]	7,33E+01	7,50E+01	1,30E+01	2,07E+01	7,63E+00	0,000	-4,31E+01
Energy ren. (net calorific value) [MJ]	1,90E+01	1,02E+01	7,94E-02	1,21E+01	4,91E-02	0,000	-3,44E+00
Water consumption [kg]	2,04E+01	1,41E+01	9,37E-02	9,84E+00	5,70E-02	0,000	-3,63E+00
Air pollution [m <sup>3</sup> ]	3,19E+02	6,58E+02	6,57E+01	7,51E+01	2,60E+01	0,000	-5,06E+02
Water pollution [m <sup>3</sup> ]	9,72E-01	7,47E-01	7,51E-02	3,00E-01	4,46E-02	0,000	-1,95E-01
Hazardous waste for disposal [kg]	1,86E-07	1,87E-07	2,66E-11	-1,54E-09	1,40E-11	0,000	4,27E-10
Disposed of non-hazardous waste [kg]	1,50E-01	8,47E-02	1,28E-03	1,49E-02	7,60E-04	0,000	4,81E-02
Disposed of radioactive waste [kg]	3,29E-03	6,31E-04	2,07E-05	3,22E-03	1,27E-05	0,000	-5,90E-04

evaluated from CML 2001, August 2016

### 1.3.4 MRP-C 13/15

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408034	MRP-C 13/15	50	3,1295	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	5,041	5,973	0,957	0,991	0,549	0,000	-3,429
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,63E-11	1,08E-11	1,20E-13	2,10E-11	7,40E-14	0,000	-5,63E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,28E-02	1,13E-02	6,37E-03	2,06E-03	1,25E-03	0,000	-8,18E-03
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	1,96E-03	1,41E-03	8,95E-04	2,39E-04	2,96E-04	0,000	-8,80E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-9,99E-05	2,01E-03	-3,79E-04	1,47E-04	-4,38E-04	0,000	-1,44E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,51E-06	2,23E-06	1,25E-08	2,09E-07	7,52E-09	0,000	5,16E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	6,53E+01	7,45E+01	1,30E+01	1,17E+01	7,64E+00	0,000	-4,16E+01
Energy (net calorific value) [MJ]	7,46E+01	7,64E+01	1,31E+01	2,08E+01	7,67E+00	0,000	-4,33E+01
Energy ren. (net calorific value) [MJ]	1,91E+01	1,03E+01	7,98E-02	1,22E+01	4,93E-02	0,000	-3,51E+00
Water consumption [kg]	2,08E+01	1,43E+01	9,43E-02	9,90E+00	5,74E-02	0,000	-3,59E+00
Air pollution [m <sup>3</sup> ]	3,22E+02	6,60E+02	6,61E+01	7,56E+01	2,62E+01	0,000	-5,06E+02
Water pollution [m <sup>3</sup> ]	9,91E-01	7,64E-01	7,56E-02	3,02E-01	4,49E-02	0,000	-1,96E-01
Hazardous waste for disposal [kg]	1,91E-07	1,92E-07	2,68E-11	-1,55E-09	1,41E-11	0,000	4,09E-10
Disposed of non-hazardous waste [kg]	1,54E-01	8,53E-02	1,29E-03	1,50E-02	7,64E-04	0,000	5,19E-02
Disposed of radioactive waste [kg]	3,31E-03	6,45E-04	2,08E-05	3,24E-03	1,28E-05	0,000	-6,09E-04

evaluated from CML 2001, August 2016

### 1.3.5 MRP-C 13/16

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408035	MRP-C 13/16	50	3,1385	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	5,086	5,998	0,959	0,995	0,550	0,000	-3,417
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,65E-11	1,09E-11	1,20E-13	2,11E-11	7,42E-14	0,000	-5,69E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,29E-02	1,14E-02	6,38E-03	2,06E-03	1,25E-03	0,000	-8,18E-03
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	1,97E-03	1,42E-03	8,97E-04	2,40E-04	2,97E-04	0,000	-8,80E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-9,47E-05	2,01E-03	-3,80E-04	1,48E-04	-4,39E-04	0,000	-1,44E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,57E-06	2,29E-06	1,26E-08	2,10E-07	7,54E-09	0,000	5,21E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	6,60E+01	7,52E+01	1,31E+01	1,18E+01	7,66E+00	0,000	-4,17E+01
Energy (net calorific value) [MJ]	7,53E+01	7,71E+01	1,31E+01	2,09E+01	7,69E+00	0,000	-4,35E+01
Energy ren. (net calorific value) [MJ]	1,92E+01	1,04E+01	8,01E-02	1,22E+01	4,95E-02	0,000	-3,55E+00
Water consumption [kg]	2,09E+01	1,44E+01	9,45E-02	9,93E+00	5,75E-02	0,000	-3,58E+00
Air pollution [m <sup>3</sup> ]	3,24E+02	6,62E+02	6,62E+01	7,58E+01	2,63E+01	0,000	-5,06E+02
Water pollution [m <sup>3</sup> ]	1,00E+00	7,73E-01	7,58E-02	3,03E-01	4,50E-02	0,000	-1,96E-01
Hazardous waste for disposal [kg]	1,93E-07	1,94E-07	2,69E-11	-1,56E-09	1,42E-11	0,000	4,00E-10
Disposed of non-hazardous waste [kg]	1,57E-01	8,56E-02	1,29E-03	1,51E-02	7,66E-04	0,000	5,39E-02
Disposed of radioactive waste [kg]	3,32E-03	6,52E-04	2,08E-05	3,25E-03	1,28E-05	0,000	-6,19E-04

evaluated from CML 2001, August 2016

### 1.3.6 MRP-C 13/17

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408036	MRP-C 13/17	50	3,1545	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	5,166	6,043	0,964	1,001	0,553	0,000	-3,395
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,68E-11	1,12E-11	1,21E-13	2,12E-11	7,46E-14	0,000	-5,79E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,30E-02	1,14E-02	6,42E-03	2,07E-03	1,26E-03	0,000	-8,18E-03
Eutrophication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> -eq.]	1,99E-03	1,43E-03	9,02E-04	2,42E-04	2,98E-04	0,000	-8,79E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-8,56E-05	2,03E-03	-3,82E-04	1,49E-04	-4,41E-04	0,000	-1,44E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,67E-06	2,39E-06	1,26E-08	2,11E-07	7,58E-09	0,000	5,29E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	6,72E+01	7,64E+01	1,31E+01	1,18E+01	7,70E+00	0,000	-4,19E+01
Energy (net calorific value) [MJ]	7,65E+01	7,83E+01	1,32E+01	2,10E+01	7,73E+00	0,000	-4,37E+01
Energy ren. (net calorific value) [MJ]	1,93E+01	1,05E+01	8,05E-02	1,23E+01	4,97E-02	0,000	-3,61E+00
Water consumption [kg]	2,13E+01	1,47E+01	9,50E-02	9,99E+00	5,78E-02	0,000	-3,54E+00
Air pollution [m <sup>3</sup> ]	3,27E+02	6,64E+02	6,66E+01	7,63E+01	2,64E+01	0,000	-5,06E+02
Water pollution [m <sup>3</sup> ]	1,02E+00	7,88E-01	7,62E-02	3,05E-01	4,52E-02	0,000	-1,96E-01
Hazardous waste for disposal [kg]	1,98E-07	1,99E-07	2,70E-11	-1,57E-09	1,42E-11	0,000	3,84E-10
Disposed of non-hazardous waste [kg]	1,61E-01	8,62E-02	1,30E-03	1,52E-02	7,70E-04	0,000	5,74E-02
Disposed of radioactive waste [kg]	3,33E-03	6,65E-04	2,10E-05	3,27E-03	1,29E-05	0,000	-6,36E-04

evaluated from CML 2001, August 2016

### 1.3.7 MRP-C 13/18

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408037	MRP-C 13/18	50	3,6905	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	5,868	7,135	1,128	1,183	0,647	0,000	-4,226
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,11E-11	1,22E-11	1,41E-13	2,51E-11	8,73E-14	0,000	-6,40E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,51E-02	1,35E-02	7,51E-03	2,45E-03	1,47E-03	0,000	-9,85E-03
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	2,28E-03	1,65E-03	1,05E-03	2,86E-04	3,49E-04	0,000	-1,06E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,29E-04	2,39E-03	-4,47E-04	1,76E-04	-5,16E-04	0,000	-1,73E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,79E-06	2,45E-06	1,48E-08	2,49E-07	8,87E-09	0,000	5,93E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	7,56E+01	8,68E+01	1,54E+01	1,40E+01	9,00E+00	0,000	-4,95E+01
Energy (net calorific value) [MJ]	8,68E+01	8,88E+01	1,54E+01	2,49E+01	9,05E+00	0,000	-5,14E+01
Energy ren. (net calorific value) [MJ]	2,18E+01	1,11E+01	9,41E-02	1,45E+01	5,82E-02	0,000	-4,00E+00
Water consumption [kg]	2,37E+01	1,62E+01	1,11E-01	1,18E+01	6,77E-02	0,000	-4,51E+00
Air pollution [m <sup>3</sup> ]	3,79E+02	7,89E+02	7,79E+01	9,02E+01	3,09E+01	0,000	-6,09E+02
Water pollution [m <sup>3</sup> ]	1,12E+00	8,49E-01	8,91E-02	3,61E-01	5,29E-02	0,000	-2,34E-01
Hazardous waste for disposal [kg]	2,01E-07	2,02E-07	3,16E-11	-1,85E-09	1,67E-11	0,000	5,52E-10
Disposed of non-hazardous waste [kg]	1,69E-01	1,00E-01	1,52E-03	1,79E-02	9,01E-04	0,000	4,89E-02
Disposed of radioactive waste [kg]	3,96E-03	7,28E-04	2,45E-05	3,87E-03	1,51E-05	0,000	-6,71E-04

evaluated from CML 2001, August 2016

### 1.3.8 MRP-C 13/20

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408038	MRP-C 13/20	50	3,7090	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	5,960	7,187	1,134	1,189	0,650	0,000	-4,201
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,14E-11	1,25E-11	1,42E-13	2,52E-11	8,77E-14	0,000	-6,52E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,52E-02	1,35E-02	7,54E-03	2,47E-03	1,48E-03	0,000	-9,85E-03
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	2,30E-03	1,66E-03	1,06E-03	2,87E-04	3,51E-04	0,000	-1,06E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,20E-04	2,40E-03	-4,49E-04	1,77E-04	-5,19E-04	0,000	-1,73E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,89E-06	2,55E-06	1,49E-08	2,51E-07	8,91E-09	0,000	6,04E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	7,70E+01	8,82E+01	1,54E+01	1,41E+01	9,05E+00	0,000	-4,97E+01
Energy (net calorific value) [MJ]	8,82E+01	9,03E+01	1,55E+01	2,50E+01	9,09E+00	0,000	-5,16E+01
Energy ren. (net calorific value) [MJ]	2,19E+01	1,12E+01	9,46E-02	1,46E+01	5,85E-02	0,000	-4,08E+00
Water consumption [kg]	2,41E+01	1,65E+01	1,12E-01	1,19E+01	6,80E-02	0,000	-4,47E+00
Air pollution [m <sup>3</sup> ]	3,82E+02	7,91E+02	7,83E+01	9,07E+01	3,10E+01	0,000	-6,09E+02
Water pollution [m <sup>3</sup> ]	1,14E+00	8,68E-01	8,96E-02	3,63E-01	5,32E-02	0,000	-2,34E-01
Hazardous waste for disposal [kg]	2,07E-07	2,08E-07	3,18E-11	-1,86E-09	1,67E-11	0,000	5,31E-10
Disposed of non-hazardous waste [kg]	1,75E-01	1,01E-01	1,52E-03	1,80E-02	9,06E-04	0,000	5,34E-02
Disposed of radioactive waste [kg]	3,98E-03	7,43E-04	2,46E-05	3,89E-03	1,52E-05	0,000	-6,92E-04

evaluated from CML 2001, August 2016

### 1.3.9 MRP-C 13/21

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408039	MRP-C 13/21	50	3,7240	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	6,035	7,229	1,138	1,195	0,653	0,000	-4,181
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,17E-11	1,27E-11	1,43E-13	2,54E-11	8,81E-14	0,000	-6,62E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,53E-02	1,36E-02	7,57E-03	2,48E-03	1,48E-03	0,000	-9,85E-03
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	2,32E-03	1,67E-03	1,06E-03	2,89E-04	3,52E-04	0,000	-1,06E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,11E-04	2,41E-03	-4,51E-04	1,77E-04	-5,21E-04	0,000	-1,73E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,98E-06	2,64E-06	1,49E-08	2,52E-07	8,95E-09	0,000	6,11E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	7,81E+01	8,93E+01	1,55E+01	1,41E+01	9,09E+00	0,000	-4,99E+01
Energy (net calorific value) [MJ]	8,94E+01	9,14E+01	1,56E+01	2,51E+01	9,13E+00	0,000	-5,19E+01
Energy ren. (net calorific value) [MJ]	2,20E+01	1,13E+01	9,50E-02	1,47E+01	5,87E-02	0,000	-4,13E+00
Water consumption [kg]	2,44E+01	1,67E+01	1,12E-01	1,19E+01	6,83E-02	0,000	-4,44E+00
Air pollution [m <sup>3</sup> ]	3,85E+02	7,94E+02	7,86E+01	9,11E+01	3,12E+01	0,000	-6,09E+02
Water pollution [m <sup>3</sup> ]	1,16E+00	8,82E-01	8,99E-02	3,64E-01	5,34E-02	0,000	-2,35E-01
Hazardous waste for disposal [kg]	2,11E-07	2,12E-07	3,19E-11	-1,87E-09	1,68E-11	0,000	5,16E-10
Disposed of non-hazardous waste [kg]	1,78E-01	1,01E-01	1,53E-03	1,81E-02	9,09E-04	0,000	5,66E-02
Disposed of radioactive waste [kg]	3,99E-03	7,55E-04	2,47E-05	3,91E-03	1,52E-05	0,000	-7,08E-04

evaluated from CML 2001, August 2016

### 1.3.10 MRP-C 13/22

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408130	MRP-C 13/22	50	3,7320	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	6,075	7,252	1,141	1,198	0,655	0,000	-4,170
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,18E-11	1,29E-11	1,43E-13	2,54E-11	8,82E-14	0,000	-6,67E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,53E-02	1,36E-02	7,59E-03	2,49E-03	1,49E-03	0,000	-9,85E-03
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	2,32E-03	1,67E-03	1,07E-03	2,89E-04	3,53E-04	0,000	-1,06E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,07E-04	2,42E-03	-4,52E-04	1,78E-04	-5,22E-04	0,000	-1,73E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,03E-06	2,69E-06	1,50E-08	2,53E-07	8,97E-09	0,000	6,15E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	7,87E+01	8,99E+01	1,55E+01	1,42E+01	9,11E+00	0,000	-5,00E+01
Energy (net calorific value) [MJ]	9,00E+01	9,20E+01	1,56E+01	2,52E+01	9,15E+00	0,000	-5,20E+01
Energy ren. (net calorific value) [MJ]	2,21E+01	1,14E+01	9,52E-02	1,47E+01	5,88E-02	0,000	-4,17E+00
Water consumption [kg]	2,46E+01	1,68E+01	1,12E-01	1,20E+01	6,84E-02	0,000	-4,43E+00
Air pollution [m <sup>3</sup> ]	3,87E+02	7,95E+02	7,88E+01	9,14E+01	3,12E+01	0,000	-6,09E+02
Water pollution [m <sup>3</sup> ]	1,16E+00	8,90E-01	9,01E-02	3,65E-01	5,35E-02	0,000	-2,35E-01
Hazardous waste for disposal [kg]	2,13E-07	2,14E-07	3,20E-11	-1,88E-09	1,68E-11	0,000	5,08E-10
Disposed of non-hazardous waste [kg]	1,81E-01	1,02E-01	1,53E-03	1,82E-02	9,11E-04	0,000	5,84E-02
Disposed of radioactive waste [kg]	4,00E-03	7,61E-04	2,48E-05	3,92E-03	1,52E-05	0,000	-7,16E-04

evaluated from CML 2001, August 2016



### 1.3.11 MRP-C 13/25

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408131	MRP-C 13/25	50	3,7665	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	6,249	7,349	1,151	1,211	0,661	0,000	-4,123
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,25E-11	1,34E-11	1,44E-13	2,57E-11	8,91E-14	0,000	-6,90E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,55E-02	1,37E-02	7,66E-03	2,51E-03	1,50E-03	0,000	-9,85E-03
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	2,36E-03	1,69E-03	1,08E-03	2,92E-04	3,56E-04	0,000	-1,06E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-8,71E-05	2,45E-03	-4,56E-04	1,80E-04	-5,27E-04	0,000	-1,73E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,25E-06	2,90E-06	1,51E-08	2,55E-07	9,05E-09	0,000	6,31E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	8,13E+01	9,25E+01	1,57E+01	1,43E+01	9,19E+00	0,000	-5,04E+01
Energy (net calorific value) [MJ]	9,26E+01	9,47E+01	1,57E+01	2,55E+01	9,23E+00	0,000	-5,25E+01
Energy ren. (net calorific value) [MJ]	2,24E+01	1,16E+01	9,61E-02	1,49E+01	5,94E-02	0,000	-4,30E+00
Water consumption [kg]	2,53E+01	1,73E+01	1,13E-01	1,21E+01	6,90E-02	0,000	-4,36E+00
Air pollution [m <sup>3</sup> ]	3,93E+02	8,00E+02	7,95E+01	9,23E+01	3,15E+01	0,000	-6,10E+02
Water pollution [m <sup>3</sup> ]	1,20E+00	9,23E-01	9,09E-02	3,69E-01	5,40E-02	0,000	-2,36E-01
Hazardous waste for disposal [kg]	2,23E-07	2,24E-07	3,22E-11	-1,90E-09	1,70E-11	0,000	4,73E-10
Disposed of non-hazardous waste [kg]	1,89E-01	1,03E-01	1,55E-03	1,84E-02	9,20E-04	0,000	6,59E-02
Disposed of radioactive waste [kg]	4,03E-03	7,89E-04	2,50E-05	3,96E-03	1,54E-05	0,000	-7,53E-04

evaluated from CML 2001, August 2016

### 1.3.12 MRP-C 13/26

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408132	MRP-C 13/26	50	4,0285	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	6,638	7,896	1,231	1,300	0,707	0,000	-4,496
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,48E-11	1,41E-11	1,54E-13	2,76E-11	9,53E-14	0,000	-7,23E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,66E-02	1,47E-02	8,19E-03	2,70E-03	1,61E-03	0,000	-1,06E-02
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	2,51E-03	1,81E-03	1,15E-03	3,14E-04	3,81E-04	0,000	-1,14E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-9,89E-05	2,63E-03	-4,88E-04	1,93E-04	-5,63E-04	0,000	-1,87E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,40E-06	3,03E-06	1,62E-08	2,74E-07	9,68E-09	0,000	6,75E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	8,62E+01	9,82E+01	1,68E+01	1,54E+01	9,83E+00	0,000	-5,40E+01
Energy (net calorific value) [MJ]	9,84E+01	1,01E+02	1,68E+01	2,73E+01	9,88E+00	0,000	-5,62E+01
Energy ren. (net calorific value) [MJ]	2,37E+01	1,20E+01	1,03E-01	1,60E+01	6,35E-02	0,000	-4,51E+00
Water consumption [kg]	2,67E+01	1,83E+01	1,21E-01	1,30E+01	7,39E-02	0,000	-4,78E+00
Air pollution [m <sup>3</sup> ]	4,20E+02	8,60E+02	8,50E+01	9,92E+01	3,37E+01	0,000	-6,58E+02
Water pollution [m <sup>3</sup> ]	1,26E+00	9,65E-01	9,73E-02	3,96E-01	5,77E-02	0,000	-2,53E-01
Hazardous waste for disposal [kg]	2,29E-07	2,30E-07	3,45E-11	-2,04E-09	1,82E-11	0,000	5,43E-10
Disposed of non-hazardous waste [kg]	1,98E-01	1,10E-01	1,66E-03	1,97E-02	9,84E-04	0,000	6,55E-02
Disposed of radioactive waste [kg]	4,35E-03	8,30E-04	2,68E-05	4,25E-03	1,65E-05	0,000	-7,78E-04

evaluated from CML 2001, August 2016

### 1.3.13 MRP-C 13/28

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408133	MRP-C 13/28	50	4,0410	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	6,701	7,931	1,235	1,305	0,709	0,000	-4,479
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,50E-11	1,44E-11	1,55E-13	2,77E-11	9,55E-14	0,000	-7,31E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,67E-02	1,48E-02	8,22E-03	2,71E-03	1,61E-03	0,000	-1,06E-02
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	2,53E-03	1,82E-03	1,16E-03	3,15E-04	3,82E-04	0,000	-1,14E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-9,18E-05	2,64E-03	-4,90E-04	1,94E-04	-5,65E-04	0,000	-1,87E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,48E-06	3,11E-06	1,62E-08	2,75E-07	9,71E-09	0,000	6,81E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	8,71E+01	9,91E+01	1,68E+01	1,54E+01	9,86E+00	0,000	-5,41E+01
Energy (net calorific value) [MJ]	9,94E+01	1,02E+02	1,69E+01	2,74E+01	9,91E+00	0,000	-5,64E+01
Energy ren. (net calorific value) [MJ]	2,38E+01	1,21E+01	1,03E-01	1,60E+01	6,37E-02	0,000	-4,56E+00
Water consumption [kg]	2,69E+01	1,85E+01	1,22E-01	1,30E+01	7,41E-02	0,000	-4,76E+00
Air pollution [m <sup>3</sup> ]	4,22E+02	8,62E+02	8,53E+01	9,95E+01	3,38E+01	0,000	-6,58E+02
Water pollution [m <sup>3</sup> ]	1,28E+00	9,77E-01	9,76E-02	3,98E-01	5,79E-02	0,000	-2,53E-01
Hazardous waste for disposal [kg]	2,32E-07	2,34E-07	3,46E-11	-2,05E-09	1,82E-11	0,000	5,30E-10
Disposed of non-hazardous waste [kg]	2,01E-01	1,10E-01	1,66E-03	1,98E-02	9,87E-04	0,000	6,82E-02
Disposed of radioactive waste [kg]	4,36E-03	8,41E-04	2,68E-05	4,27E-03	1,65E-05	0,000	-7,91E-04

evaluated from CML 2001, August 2016

### 1.3.14 MRP-C 13/32

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408134	MRP-C 13/32	50	4,0870	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	6,932	8,061	1,249	1,322	0,717	0,000	-4,417
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,58E-11	1,51E-11	1,56E-13	2,81E-11	9,66E-14	0,000	-7,62E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,70E-02	1,49E-02	8,31E-03	2,74E-03	1,63E-03	0,000	-1,06E-02
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	2,58E-03	1,84E-03	1,17E-03	3,19E-04	3,87E-04	0,000	-1,14E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-6,57E-05	2,68E-03	-4,95E-04	1,96E-04	-5,72E-04	0,000	-1,87E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,76E-06	3,39E-06	1,64E-08	2,79E-07	9,82E-09	0,000	7,03E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	9,05E+01	1,03E+02	1,70E+01	1,56E+01	9,97E+00	0,000	-5,47E+01
Energy (net calorific value) [MJ]	1,03E+02	1,05E+02	1,71E+01	2,78E+01	1,00E+01	0,000	-5,70E+01
Energy ren. (net calorific value) [MJ]	2,41E+01	1,24E+01	1,04E-01	1,62E+01	6,44E-02	0,000	-4,74E+00
Water consumption [kg]	2,79E+01	1,91E+01	1,23E-01	1,32E+01	7,49E-02	0,000	-4,66E+00
Air pollution [m <sup>3</sup> ]	4,31E+02	8,68E+02	8,63E+01	1,01E+02	3,42E+01	0,000	-6,59E+02
Water pollution [m <sup>3</sup> ]	1,33E+00	1,02E+00	9,87E-02	4,03E-01	5,86E-02	0,000	-2,55E-01
Hazardous waste for disposal [kg]	2,45E-07	2,47E-07	3,50E-11	-2,07E-09	1,84E-11	0,000	4,84E-10
Disposed of non-hazardous waste [kg]	2,13E-01	1,12E-01	1,68E-03	2,00E-02	9,98E-04	0,000	7,82E-02
Disposed of radioactive waste [kg]	4,40E-03	8,78E-04	2,71E-05	4,32E-03	1,67E-05	0,000	-8,40E-04

evaluated from CML 2001, August 2016

### 1.3.15 MRP-C 13/33

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408135	MRP-C 13/33	20	1,7936	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	2,938	3,197	0,548	0,539	0,315	0,000	-1,661
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,45E-11	6,55E-12	6,87E-14	1,14E-11	4,24E-14	0,000	-3,59E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	7,47E-03	6,33E-03	3,65E-03	1,12E-03	7,15E-04	0,000	-4,34E-03
Eutrophication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	1,19E-03	8,38E-04	5,13E-04	1,30E-04	1,70E-04	0,000	-4,65E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-4,55E-05	1,11E-03	-2,17E-04	8,01E-05	-2,51E-04	0,000	-7,64E-04
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,62E-06	1,46E-06	7,19E-09	1,14E-07	4,31E-09	0,000	2,63E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,87E+01	4,36E+01	7,46E+00	6,37E+00	4,38E+00	0,000	-2,31E+01
Energy (net calorific value) [MJ]	4,37E+01	4,47E+01	7,50E+00	1,13E+01	4,40E+00	0,000	-2,43E+01
Energy ren. (net calorific value) [MJ]	1,26E+01	8,12E+00	4,58E-02	6,63E+00	2,83E-02	0,000	-2,21E+00
Water consumption [kg]	1,32E+01	9,35E+00	5,40E-02	5,39E+00	3,29E-02	0,000	-1,58E+00
Air pollution [m <sup>3</sup> ]	1,84E+02	3,60E+02	3,79E+01	4,11E+01	1,50E+01	0,000	-2,70E+02
Water pollution [m <sup>3</sup> ]	6,41E-01	5,18E-01	4,33E-02	1,64E-01	2,57E-02	0,000	-1,11E-01
Hazardous waste for disposal [kg]	1,40E-07	1,41E-07	1,54E-11	-8,46E-10	8,10E-12	0,000	1,24E-10
Disposed of non-hazardous waste [kg]	9,72E-02	5,01E-02	7,37E-04	8,18E-03	4,38E-04	0,000	3,78E-02
Disposed of radioactive waste [kg]	1,77E-03	4,09E-04	1,19E-05	1,76E-03	7,33E-06	0,000	-4,19E-04

evaluated from CML 2001, August 2016

### 1.3.16 MRP-C 13/35

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408136	MRP-C 13/35	20	1,8302	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	3,122	3,299	0,559	0,553	0,321	0,000	-1,610
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,52E-11	7,19E-12	7,01E-14	1,17E-11	4,33E-14	0,000	-3,81E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	7,71E-03	6,44E-03	3,72E-03	1,15E-03	7,30E-04	0,000	-4,34E-03
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	1,23E-03	8,61E-04	5,23E-04	1,34E-04	1,73E-04	0,000	-4,63E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,13E-05	1,14E-03	-2,22E-04	8,21E-05	-2,56E-04	0,000	-7,65E-04
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,88E-06	1,72E-06	7,34E-09	1,17E-07	4,40E-09	0,000	2,81E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	4,14E+01	4,62E+01	7,62E+00	6,53E+00	4,47E+00	0,000	-2,35E+01
Energy (net calorific value) [MJ]	4,65E+01	4,75E+01	7,65E+00	1,16E+01	4,49E+00	0,000	-2,47E+01
Energy ren. (net calorific value) [MJ]	1,29E+01	8,40E+00	4,67E-02	6,80E+00	2,88E-02	0,000	-2,35E+00
Water consumption [kg]	1,40E+01	9,93E+00	5,51E-02	5,52E+00	3,36E-02	0,000	-1,50E+00
Air pollution [m <sup>3</sup> ]	1,91E+02	3,66E+02	3,86E+01	4,21E+01	1,53E+01	0,000	-2,70E+02
Water pollution [m <sup>3</sup> ]	6,79E-01	5,51E-01	4,42E-02	1,69E-01	2,62E-02	0,000	-1,11E-01
Hazardous waste for disposal [kg]	1,50E-07	1,51E-07	1,57E-11	-8,67E-10	8,26E-12	0,000	9,32E-11
Disposed of non-hazardous waste [kg]	1,06E-01	5,13E-02	7,52E-04	8,38E-03	4,47E-04	0,000	4,55E-02
Disposed of radioactive waste [kg]	1,81E-03	4,40E-04	1,22E-05	1,81E-03	7,48E-06	0,000	-4,55E-04

evaluated from CML 2001, August 2016

### 1.3.17 MRP-C 13/40

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408137	MRP-C 13/40	20	1,9524	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	3,365	3,567	0,597	0,595	0,342	0,000	-1,736
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,65E-11	7,77E-12	7,48E-14	1,26E-11	4,62E-14	0,000	-4,05E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	8,24E-03	6,90E-03	3,97E-03	1,23E-03	7,78E-04	0,000	-4,64E-03
Eutrophication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	1,31E-03	9,16E-04	5,58E-04	1,44E-04	1,85E-04	0,000	-4,96E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,57E-05	1,23E-03	-2,37E-04	8,83E-05	-2,73E-04	0,000	-8,20E-04
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,05E-06	1,88E-06	7,83E-09	1,26E-07	4,69E-09	0,000	3,06E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	4,46E+01	4,98E+01	8,12E+00	7,03E+00	4,76E+00	0,000	-2,51E+01
Energy (net calorific value) [MJ]	5,01E+01	5,11E+01	8,16E+00	1,25E+01	4,79E+00	0,000	-2,65E+01
Energy ren. (net calorific value) [MJ]	1,36E+01	8,68E+00	4,98E-02	7,32E+00	3,08E-02	0,000	-2,50E+00
Water consumption [kg]	1,50E+01	1,06E+01	5,88E-02	5,95E+00	3,58E-02	0,000	-1,64E+00
Air pollution [m <sup>3</sup> ]	2,06E+02	3,92E+02	4,12E+01	4,54E+01	1,63E+01	0,000	-2,90E+02
Water pollution [m <sup>3</sup> ]	7,22E-01	5,84E-01	4,71E-02	1,81E-01	2,80E-02	0,000	-1,19E-01
Hazardous waste for disposal [kg]	1,57E-07	1,58E-07	1,67E-11	-9,33E-10	8,81E-12	0,000	1,04E-10
Disposed of non-hazardous waste [kg]	1,14E-01	5,47E-02	8,02E-04	9,02E-03	4,77E-04	0,000	4,90E-02
Disposed of radioactive waste [kg]	1,95E-03	4,71E-04	1,30E-05	1,95E-03	7,98E-06	0,000	-4,83E-04

evaluated from CML 2001, August 2016

### 1.3.18 MRP-C 13/42

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408138	MRP-C 13/42	20	1,9648	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	3,427	3,602	0,601	0,600	0,345	0,000	-1,719
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,67E-11	7,98E-12	7,52E-14	1,27E-11	4,65E-14	0,000	-4,14E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	8,32E-03	6,94E-03	4,00E-03	1,24E-03	7,83E-04	0,000	-4,64E-03
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	1,32E-03	9,24E-04	5,62E-04	1,45E-04	1,86E-04	0,000	-4,95E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-8,43E-06	1,24E-03	-2,38E-04	8,90E-05	-2,75E-04	0,000	-8,20E-04
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,13E-06	1,96E-06	7,88E-09	1,27E-07	4,72E-09	0,000	3,12E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	4,56E+01	5,07E+01	8,18E+00	7,08E+00	4,79E+00	0,000	-2,52E+01
Energy (net calorific value) [MJ]	5,11E+01	5,21E+01	8,21E+00	1,26E+01	4,82E+00	0,000	-2,66E+01
Energy ren. (net calorific value) [MJ]	1,37E+01	8,77E+00	5,01E-02	7,37E+00	3,10E-02	0,000	-2,55E+00
Water consumption [kg]	1,52E+01	1,07E+01	5,92E-02	5,99E+00	3,60E-02	0,000	-1,61E+00
Air pollution [m <sup>3</sup> ]	2,08E+02	3,94E+02	4,15E+01	4,57E+01	1,64E+01	0,000	-2,90E+02
Water pollution [m <sup>3</sup> ]	7,35E-01	5,96E-01	4,74E-02	1,83E-01	2,82E-02	0,000	-1,19E-01
Hazardous waste for disposal [kg]	1,61E-07	1,61E-07	1,68E-11	-9,40E-10	8,87E-12	0,000	9,18E-11
Disposed of non-hazardous waste [kg]	1,17E-01	5,51E-02	8,07E-04	9,09E-03	4,80E-04	0,000	5,17E-02
Disposed of radioactive waste [kg]	1,97E-03	4,81E-04	1,30E-05	1,96E-03	8,03E-06	0,000	-4,96E-04

evaluated from CML 2001, August 2016



### 1.3.19 MRP-C 13/48

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408139	MRP-C 13/48	20	3,2978	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	5,128	6,322	1,008	1,052	0,578	0,000	-3,832
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,76E-11	1,05E-11	1,26E-13	2,23E-11	7,80E-14	0,000	-5,46E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,35E-02	1,21E-02	6,71E-03	2,18E-03	1,31E-03	0,000	-8,82E-03
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	2,05E-03	1,49E-03	9,43E-04	2,54E-04	3,12E-04	0,000	-9,44E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,19E-04	2,13E-03	-4,00E-04	1,56E-04	-4,61E-04	0,000	-1,55E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,43E-06	2,14E-06	1,32E-08	2,22E-07	7,92E-09	0,000	4,92E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	6,60E+01	7,57E+01	1,37E+01	1,24E+01	8,05E+00	0,000	-4,39E+01
Energy (net calorific value) [MJ]	7,60E+01	7,75E+01	1,38E+01	2,21E+01	8,08E+00	0,000	-4,55E+01
Energy ren. (net calorific value) [MJ]	1,99E+01	1,03E+01	8,41E-02	1,29E+01	5,20E-02	0,000	-3,42E+00
Water consumption [kg]	2,12E+01	1,46E+01	9,93E-02	1,05E+01	6,05E-02	0,000	-4,06E+00
Air pollution [m <sup>3</sup> ]	3,37E+02	7,06E+02	6,96E+01	8,03E+01	2,76E+01	0,000	-5,46E+02
Water pollution [m <sup>3</sup> ]	9,82E-01	7,45E-01	7,96E-02	3,21E-01	4,73E-02	0,000	-2,11E-01
Hazardous waste for disposal [kg]	1,68E-07	1,69E-07	2,82E-11	-1,65E-09	1,49E-11	0,000	5,39E-10
Disposed of non-hazardous waste [kg]	1,38E-01	8,97E-02	1,36E-03	1,60E-02	8,05E-04	0,000	3,07E-02
Disposed of radioactive waste [kg]	3,56E-03	6,35E-04	2,19E-05	3,44E-03	1,35E-05	0,000	-5,56E-04

evaluated from CML 2001, August 2016

### 1.3.20 MRP-C 13/50

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408140	MRP-C 13/50	20	3,3066	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	5,172	6,347	1,011	1,055	0,580	0,000	-3,820
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,77E-11	1,06E-11	1,27E-13	2,24E-11	7,82E-14	0,000	-5,52E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,35E-02	1,21E-02	6,73E-03	2,19E-03	1,32E-03	0,000	-8,82E-03
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	2,06E-03	1,49E-03	9,45E-04	2,55E-04	3,13E-04	0,000	-9,44E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,13E-04	2,14E-03	-4,01E-04	1,57E-04	-4,62E-04	0,000	-1,55E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,49E-06	2,20E-06	1,33E-08	2,23E-07	7,94E-09	0,000	4,96E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	6,66E+01	7,64E+01	1,38E+01	1,25E+01	8,07E+00	0,000	-4,40E+01
Energy (net calorific value) [MJ]	7,67E+01	7,82E+01	1,38E+01	2,22E+01	8,11E+00	0,000	-4,56E+01
Energy ren. (net calorific value) [MJ]	2,00E+01	1,03E+01	8,44E-02	1,30E+01	5,21E-02	0,000	-3,46E+00
Water consumption [kg]	2,14E+01	1,47E+01	9,96E-02	1,06E+01	6,06E-02	0,000	-4,04E+00
Air pollution [m <sup>3</sup> ]	3,39E+02	7,07E+02	6,98E+01	8,05E+01	2,77E+01	0,000	-5,46E+02
Water pollution [m <sup>3</sup> ]	9,91E-01	7,53E-01	7,98E-02	3,22E-01	4,74E-02	0,000	-2,11E-01
Hazardous waste for disposal [kg]	1,71E-07	1,72E-07	2,83E-11	-1,66E-09	1,49E-11	0,000	5,31E-10
Disposed of non-hazardous waste [kg]	1,41E-01	9,00E-02	1,36E-03	1,60E-02	8,07E-04	0,000	3,25E-02
Disposed of radioactive waste [kg]	3,56E-03	6,42E-04	2,20E-05	3,45E-03	1,35E-05	0,000	-5,65E-04

evaluated from CML 2001, August 2016

### 1.3.21 MRP-C 13/54

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408141	MRP-C 13/54	20	3,3274	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	5,277	6,405	1,017	1,063	0,584	0,000	-3,792
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,81E-11	1,10E-11	1,27E-13	2,26E-11	7,87E-14	0,000	-5,65E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,37E-02	1,22E-02	6,77E-03	2,21E-03	1,33E-03	0,000	-8,82E-03
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	2,08E-03	1,50E-03	9,51E-04	2,57E-04	3,15E-04	0,000	-9,43E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,01E-04	2,16E-03	-4,03E-04	1,58E-04	-4,65E-04	0,000	-1,55E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,62E-06	2,33E-06	1,33E-08	2,24E-07	7,99E-09	0,000	5,06E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	6,82E+01	7,79E+01	1,38E+01	1,26E+01	8,12E+00	0,000	-4,43E+01
Energy (net calorific value) [MJ]	7,83E+01	7,98E+01	1,39E+01	2,24E+01	8,16E+00	0,000	-4,59E+01
Energy ren. (net calorific value) [MJ]	2,02E+01	1,05E+01	8,49E-02	1,31E+01	5,24E-02	0,000	-3,54E+00
Water consumption [kg]	2,18E+01	1,51E+01	1,00E-01	1,06E+01	6,10E-02	0,000	-4,00E+00
Air pollution [m <sup>3</sup> ]	3,43E+02	7,10E+02	7,02E+01	8,11E+01	2,78E+01	0,000	-5,46E+02
Water pollution [m <sup>3</sup> ]	1,01E+00	7,73E-01	8,03E-02	3,24E-01	4,77E-02	0,000	-2,12E-01
Hazardous waste for disposal [kg]	1,77E-07	1,78E-07	2,85E-11	-1,67E-09	1,50E-11	0,000	5,10E-10
Disposed of non-hazardous waste [kg]	1,46E-01	9,07E-02	1,37E-03	1,61E-02	8,12E-04	0,000	3,70E-02
Disposed of radioactive waste [kg]	3,58E-03	6,59E-04	2,21E-05	3,48E-03	1,36E-05	0,000	-5,87E-04

evaluated from CML 2001, August 2016

### 1.3.22 MRP-C 13/57

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408142	MRP-C 13/57	20	3,5562	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	5,593	6,812	1,087	1,132	0,624	0,000	-4,062
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,99E-11	1,16E-11	1,36E-13	2,41E-11	8,41E-14	0,000	-5,99E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,46E-02	1,30E-02	7,23E-03	2,35E-03	1,42E-03	0,000	-9,43E-03
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	2,23E-03	1,61E-03	1,02E-03	2,74E-04	3,36E-04	0,000	-1,01E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,15E-04	2,30E-03	-4,31E-04	1,68E-04	-4,97E-04	0,000	-1,66E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,75E-06	2,43E-06	1,43E-08	2,39E-07	8,54E-09	0,000	5,35E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	7,22E+01	8,26E+01	1,48E+01	1,34E+01	8,68E+00	0,000	-4,72E+01
Energy (net calorific value) [MJ]	8,30E+01	8,45E+01	1,49E+01	2,38E+01	8,72E+00	0,000	-4,90E+01
Energy ren. (net calorific value) [MJ]	2,17E+01	1,14E+01	9,07E-02	1,39E+01	5,61E-02	0,000	-3,75E+00
Water consumption [kg]	2,33E+01	1,61E+01	1,07E-01	1,13E+01	6,52E-02	0,000	-4,28E+00
Air pollution [m <sup>3</sup> ]	3,65E+02	7,58E+02	7,51E+01	8,64E+01	2,98E+01	0,000	-5,84E+02
Water pollution [m <sup>3</sup> ]	1,08E+00	8,24E-01	8,59E-02	3,46E-01	5,10E-02	0,000	-2,26E-01
Hazardous waste for disposal [kg]	1,88E-07	1,90E-07	3,04E-11	-1,78E-09	1,61E-11	0,000	5,53E-10
Disposed of non-hazardous waste [kg]	1,54E-01	9,70E-02	1,46E-03	1,72E-02	8,68E-04	0,000	3,73E-02
Disposed of radioactive waste [kg]	3,82E-03	6,99E-04	2,36E-05	3,70E-03	1,45E-05	0,000	-6,19E-04

evaluated from CML 2001, August 2016

### 1.3.23 MRP-C 13/60

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408143	MRP-C 13/60	20	4,1300	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	6,292	8,092	1,262	1,149	0,724	0,000	-4,935
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,11E-11	1,30E-11	1,58E-13	2,44E-11	9,77E-14	0,000	-6,57E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,66E-02	1,53E-02	8,40E-03	2,39E-03	1,65E-03	0,000	-1,12E-02
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	2,54E-03	1,88E-03	1,18E-03	2,78E-04	3,91E-04	0,000	-1,20E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,96E-04	2,67E-03	-5,00E-04	1,71E-04	-5,78E-04	0,000	-1,96E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,88E-06	2,54E-06	1,66E-08	2,42E-07	9,92E-09	0,000	6,15E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	8,09E+01	9,52E+01	1,72E+01	1,36E+01	1,01E+01	0,000	-5,51E+01
Energy (net calorific value) [MJ]	9,20E+01	9,74E+01	1,73E+01	2,42E+01	1,01E+01	0,000	-5,70E+01
Energy ren. (net calorific value) [MJ]	2,27E+01	1,25E+01	1,05E-01	1,41E+01	6,51E-02	0,000	-4,14E+00
Water consumption [kg]	2,36E+01	1,72E+01	1,24E-01	1,15E+01	7,57E-02	0,000	-5,26E+00
Air pollution [m <sup>3</sup> ]	4,04E+02	8,87E+02	8,72E+01	8,77E+01	3,46E+01	0,000	-6,92E+02
Water pollution [m <sup>3</sup> ]	1,16E+00	9,11E-01	9,97E-02	3,51E-01	5,92E-02	0,000	-2,65E-01
Hazardous waste for disposal [kg]	1,98E-07	1,99E-07	3,54E-11	-1,81E-09	1,86E-11	0,000	7,36E-10
Disposed of non-hazardous waste [kg]	1,64E-01	1,13E-01	1,70E-03	1,74E-02	1,01E-03	0,000	3,00E-02
Disposed of radioactive waste [kg]	3,94E-03	7,86E-04	2,74E-05	3,76E-03	1,69E-05	0,000	-6,48E-04

evaluated from CML 2001, August 2016

### 1.3.24 MRP-C 13/63

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408144	MRP-C 13/63	20	4,1306	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	6,374	8,223	1,263	1,155	0,724	0,000	-4,991
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,15E-11	1,33E-11	1,58E-13	2,45E-11	9,77E-14	0,000	-6,56E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,66E-02	1,54E-02	8,40E-03	2,40E-03	1,65E-03	0,000	-1,12E-02
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	2,53E-03	1,88E-03	1,18E-03	2,79E-04	3,91E-04	0,000	-1,20E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,83E-04	2,70E-03	-5,00E-04	1,72E-04	-5,78E-04	0,000	-1,98E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,96E-06	2,63E-06	1,66E-08	2,44E-07	9,92E-09	0,000	6,33E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	8,20E+01	9,65E+01	1,72E+01	1,36E+01	1,01E+01	0,000	-5,54E+01
Energy (net calorific value) [MJ]	9,32E+01	9,87E+01	1,73E+01	2,43E+01	1,01E+01	0,000	-5,72E+01
Energy ren. (net calorific value) [MJ]	2,20E+01	1,17E+01	1,05E-01	1,42E+01	6,51E-02	0,000	-4,13E+00
Water consumption [kg]	2,34E+01	1,70E+01	1,24E-01	1,16E+01	7,57E-02	0,000	-5,37E+00
Air pollution [m <sup>3</sup> ]	4,06E+02	8,93E+02	8,72E+01	8,82E+01	3,46E+01	0,000	-6,96E+02
Water pollution [m <sup>3</sup> ]	1,15E+00	8,99E-01	9,97E-02	3,53E-01	5,92E-02	0,000	-2,65E-01
Hazardous waste for disposal [kg]	1,90E-07	1,91E-07	3,54E-11	-1,82E-09	1,86E-11	0,000	7,49E-10
Disposed of non-hazardous waste [kg]	1,65E-01	1,13E-01	1,70E-03	1,75E-02	1,01E-03	0,000	3,14E-02
Disposed of radioactive waste [kg]	3,97E-03	7,88E-04	2,74E-05	3,78E-03	1,69E-05	0,000	-6,44E-04

evaluated from CML 2001, August 2016

### 1.3.25 MRP-C 13/64

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408145	MRP-C 13/64	20	4,1370	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	6,391	8,239	1,264	1,156	0,726	0,000	-4,994
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,16E-11	1,33E-11	1,58E-13	2,46E-11	9,78E-14	0,000	-6,58E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,66E-02	1,54E-02	8,41E-03	2,40E-03	1,65E-03	0,000	-1,13E-02
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	2,53E-03	1,88E-03	1,18E-03	2,79E-04	3,91E-04	0,000	-1,20E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,82E-04	2,70E-03	-5,01E-04	1,72E-04	-5,79E-04	0,000	-1,98E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,98E-06	2,65E-06	1,66E-08	2,44E-07	9,94E-09	0,000	6,34E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	8,22E+01	9,67E+01	1,72E+01	1,37E+01	1,01E+01	0,000	-5,55E+01
Energy (net calorific value) [MJ]	9,34E+01	9,90E+01	1,73E+01	2,43E+01	1,01E+01	0,000	-5,73E+01
Energy ren. (net calorific value) [MJ]	2,20E+01	1,17E+01	1,06E-01	1,42E+01	6,52E-02	0,000	-4,14E+00
Water consumption [kg]	2,34E+01	1,70E+01	1,25E-01	1,16E+01	7,58E-02	0,000	-5,37E+00
Air pollution [m <sup>3</sup> ]	4,07E+02	8,94E+02	8,73E+01	8,83E+01	3,46E+01	0,000	-6,97E+02
Water pollution [m <sup>3</sup> ]	1,15E+00	9,01E-01	9,99E-02	3,53E-01	5,93E-02	0,000	-2,65E-01
Hazardous waste for disposal [kg]	1,91E-07	1,92E-07	3,54E-11	-1,82E-09	1,87E-11	0,000	7,47E-10
Disposed of non-hazardous waste [kg]	1,66E-01	1,14E-01	1,70E-03	1,75E-02	1,01E-03	0,000	3,19E-02
Disposed of radioactive waste [kg]	3,97E-03	7,90E-04	2,75E-05	3,78E-03	1,69E-05	0,000	-6,47E-04

evaluated from CML 2001, August 2016

### 1.3.26 MRP-C 13/66

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408146	MRP-C 13/66	20	4,3922	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	6,730	8,703	1,342	1,228	0,770	0,000	-5,314
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,34E-11	1,40E-11	1,68E-13	2,61E-11	1,04E-13	0,000	-6,92E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,76E-02	1,64E-02	8,93E-03	2,55E-03	1,75E-03	0,000	-1,20E-02
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	2,69E-03	2,00E-03	1,26E-03	2,97E-04	4,16E-04	0,000	-1,28E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,01E-04	2,86E-03	-5,32E-04	1,83E-04	-6,14E-04	0,000	-2,10E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,10E-06	2,74E-06	1,76E-08	2,59E-07	1,06E-08	0,000	6,66E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	8,65E+01	1,02E+02	1,83E+01	1,45E+01	1,07E+01	0,000	-5,88E+01
Energy (net calorific value) [MJ]	9,84E+01	1,04E+02	1,84E+01	2,58E+01	1,08E+01	0,000	-6,07E+01
Energy ren. (net calorific value) [MJ]	2,36E+01	1,27E+01	1,12E-01	1,51E+01	6,92E-02	0,000	-4,36E+00
Water consumption [kg]	2,48E+01	1,81E+01	1,32E-01	1,23E+01	8,05E-02	0,000	-5,70E+00
Air pollution [m <sup>3</sup> ]	4,31E+02	9,48E+02	9,27E+01	9,37E+01	3,67E+01	0,000	-7,40E+02
Water pollution [m <sup>3</sup> ]	1,22E+00	9,54E-01	1,06E-01	3,75E-01	6,29E-02	0,000	-2,82E-01
Hazardous waste for disposal [kg]	2,02E-07	2,04E-07	3,76E-11	-1,93E-09	1,98E-11	0,000	8,03E-10
Disposed of non-hazardous waste [kg]	1,73E-01	1,21E-01	1,80E-03	1,86E-02	1,07E-03	0,000	3,13E-02
Disposed of radioactive waste [kg]	4,22E-03	8,33E-04	2,92E-05	4,02E-03	1,79E-05	0,000	-6,77E-04

evaluated from CML 2001, August 2016



### 1.3.27 MRP-C 13/75

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408147	MRP-C 13/75	20	4,9604	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	7,758	9,935	1,516	1,364	0,870	0,000	-5,927
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,78E-11	1,65E-11	1,90E-13	2,90E-11	1,17E-13	0,000	-7,94E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	2,00E-02	1,85E-02	1,01E-02	2,83E-03	1,98E-03	0,000	-1,34E-02
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	3,05E-03	2,27E-03	1,42E-03	3,30E-04	4,69E-04	0,000	-1,43E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,96E-04	3,26E-03	-6,01E-04	2,03E-04	-6,94E-04	0,000	-2,36E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,81E-06	3,42E-06	1,99E-08	2,88E-07	1,19E-08	0,000	7,69E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,00E+02	1,18E+02	2,06E+01	1,61E+01	1,21E+01	0,000	-6,64E+01
Energy (net calorific value) [MJ]	1,13E+02	1,20E+02	2,07E+01	2,87E+01	1,22E+01	0,000	-6,86E+01
Energy ren. (net calorific value) [MJ]	2,62E+01	1,42E+01	1,27E-01	1,68E+01	7,82E-02	0,000	-5,00E+00
Water consumption [kg]	2,82E+01	2,07E+01	1,49E-01	1,36E+01	9,09E-02	0,000	-6,35E+00
Air pollution [m <sup>3</sup> ]	4,89E+02	1,07E+03	1,05E+02	1,04E+02	4,15E+01	0,000	-8,32E+02
Water pollution [m <sup>3</sup> ]	1,39E+00	1,10E+00	1,20E-01	4,16E-01	7,11E-02	0,000	-3,16E-01
Hazardous waste for disposal [kg]	2,33E-07	2,34E-07	4,25E-11	-2,15E-09	2,24E-11	0,000	8,82E-10
Disposed of non-hazardous waste [kg]	2,03E-01	1,37E-01	2,04E-03	2,07E-02	1,21E-03	0,000	4,22E-02
Disposed of radioactive waste [kg]	4,70E-03	9,70E-04	3,29E-05	4,46E-03	2,03E-05	0,000	-7,87E-04

evaluated from CML 2001, August 2016

### 1.3.28 MRP-C 13/76

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408148	MRP-C 13/76	20	4,9464	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	7,764	9,905	1,512	1,366	0,867	0,000	-5,887
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,79E-11	1,65E-11	1,89E-13	2,90E-11	1,17E-13	0,000	-7,96E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	2,00E-02	1,85E-02	1,01E-02	2,84E-03	1,97E-03	0,000	-1,34E-02
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	3,05E-03	2,26E-03	1,41E-03	3,30E-04	4,68E-04	0,000	-1,43E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,91E-04	3,25E-03	-5,99E-04	2,03E-04	-6,92E-04	0,000	-2,35E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,84E-06	3,44E-06	1,98E-08	2,88E-07	1,19E-08	0,000	7,70E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,00E+02	1,18E+02	2,06E+01	1,61E+01	1,21E+01	0,000	-6,62E+01
Energy (net calorific value) [MJ]	1,13E+02	1,20E+02	2,07E+01	2,87E+01	1,21E+01	0,000	-6,84E+01
Energy ren. (net calorific value) [MJ]	2,63E+01	1,43E+01	1,26E-01	1,68E+01	7,80E-02	0,000	-5,01E+00
Water consumption [kg]	2,84E+01	2,08E+01	1,49E-01	1,37E+01	9,07E-02	0,000	-6,31E+00
Air pollution [m <sup>3</sup> ]	4,89E+02	1,07E+03	1,04E+02	1,04E+02	4,14E+01	0,000	-8,28E+02
Water pollution [m <sup>3</sup> ]	1,39E+00	1,10E+00	1,19E-01	4,17E-01	7,09E-02	0,000	-3,15E-01
Hazardous waste for disposal [kg]	2,35E-07	2,36E-07	4,24E-11	-2,15E-09	2,23E-11	0,000	8,68E-10
Disposed of non-hazardous waste [kg]	2,04E-01	1,36E-01	2,03E-03	2,07E-02	1,21E-03	0,000	4,40E-02
Disposed of radioactive waste [kg]	4,70E-03	9,72E-04	3,29E-05	4,47E-03	2,02E-05	0,000	-7,93E-04

evaluated from CML 2001, August 2016

### 1.3.29 MRP-C 13/88

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408149	MRP-C 13/88	10	3,1378	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	4,651	5,012	0,959	0,729	0,550	0,000	-2,600
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,99E-11	1,04E-11	1,20E-13	1,55E-11	7,42E-14	0,000	-6,26E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,28E-02	1,09E-02	6,38E-03	1,51E-03	1,25E-03	0,000	-7,20E-03
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	2,15E-03	1,54E-03	8,97E-04	1,76E-04	2,97E-04	0,000	-7,65E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,67E-04	1,80E-03	-3,80E-04	1,08E-04	-4,39E-04	0,000	-1,26E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,40E-06	2,19E-06	1,26E-08	1,54E-07	7,54E-09	0,000	3,12E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	6,16E+01	7,09E+01	1,31E+01	8,61E+00	7,66E+00	0,000	-3,86E+01
Energy (net calorific value) [MJ]	6,84E+01	7,29E+01	1,31E+01	1,53E+01	7,69E+00	0,000	-4,07E+01
Energy ren. (net calorific value) [MJ]	2,43E+01	1,90E+01	8,00E-02	8,98E+00	4,95E-02	0,000	-3,84E+00
Water consumption [kg]	2,23E+01	1,70E+01	9,45E-02	7,30E+00	5,75E-02	0,000	-2,15E+00
Air pollution [m <sup>3</sup> ]	2,95E+02	5,95E+02	6,62E+01	5,57E+01	2,63E+01	0,000	-4,48E+02
Water pollution [m <sup>3</sup> ]	1,13E+00	9,81E-01	7,58E-02	2,23E-01	4,50E-02	0,000	-1,97E-01
Hazardous waste for disposal [kg]	2,75E-07	2,76E-07	2,69E-11	-1,15E-09	1,42E-11	0,000	1,68E-10
Disposed of non-hazardous waste [kg]	1,50E-01	9,01E-02	1,29E-03	1,11E-02	7,66E-04	0,000	4,67E-02
Disposed of radioactive waste [kg]	2,40E-03	7,20E-04	2,08E-05	2,39E-03	1,28E-05	0,000	-7,38E-04

evaluated from CML 2001, August 2016

### 1.3.30 MRP-C 13/90

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408150	MRP-C 13/90	10	3,1258	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	4,658	5,047	0,955	0,731	0,548	0,000	-2,623
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,00E-11	1,05E-11	1,20E-13	1,55E-11	7,39E-14	0,000	-6,21E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,28E-02	1,09E-02	6,36E-03	1,52E-03	1,25E-03	0,000	-7,21E-03
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	2,13E-03	1,53E-03	8,93E-04	1,77E-04	2,96E-04	0,000	-7,66E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,63E-04	1,81E-03	-3,79E-04	1,09E-04	-4,37E-04	0,000	-1,26E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,41E-06	2,20E-06	1,25E-08	1,54E-07	7,51E-09	0,000	3,17E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	6,16E+01	7,10E+01	1,30E+01	8,63E+00	7,63E+00	0,000	-3,86E+01
Energy (net calorific value) [MJ]	6,84E+01	7,30E+01	1,31E+01	1,54E+01	7,66E+00	0,000	-4,07E+01
Energy ren. (net calorific value) [MJ]	2,39E+01	1,86E+01	7,97E-02	8,99E+00	4,93E-02	0,000	-3,82E+00
Water consumption [kg]	2,21E+01	1,68E+01	9,41E-02	7,31E+00	5,73E-02	0,000	-2,20E+00
Air pollution [m <sup>3</sup> ]	2,95E+02	5,96E+02	6,60E+01	5,57E+01	2,62E+01	0,000	-4,49E+02
Water pollution [m <sup>3</sup> ]	1,12E+00	9,69E-01	7,55E-02	2,23E-01	4,48E-02	0,000	-1,96E-01
Hazardous waste for disposal [kg]	2,70E-07	2,71E-07	2,68E-11	-1,15E-09	1,41E-11	0,000	1,77E-10
Disposed of non-hazardous waste [kg]	1,49E-01	8,96E-02	1,28E-03	1,11E-02	7,63E-04	0,000	4,65E-02
Disposed of radioactive waste [kg]	2,41E-03	7,15E-04	2,08E-05	2,39E-03	1,28E-05	0,000	-7,31E-04

evaluated from CML 2001, August 2016

### 1.3.31 MRP-C 13/108

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408151	MRP-C 13/108	10	3,9105	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	5,770	6,698	1,195	0,973	0,686	0,000	-3,782
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,63E-11	1,25E-11	1,50E-13	2,07E-11	9,25E-14	0,000	-7,12E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,59E-02	1,39E-02	7,95E-03	2,02E-03	1,56E-03	0,000	-9,57E-03
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	2,58E-03	1,88E-03	1,12E-03	2,35E-04	3,70E-04	0,000	-1,02E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,10E-04	2,34E-03	-4,74E-04	1,45E-04	-5,47E-04	0,000	-1,68E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,80E-06	2,53E-06	1,57E-08	2,05E-07	9,39E-09	0,000	4,42E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	7,54E+01	8,76E+01	1,63E+01	1,15E+01	9,54E+00	0,000	-4,95E+01
Energy (net calorific value) [MJ]	8,47E+01	9,00E+01	1,63E+01	2,05E+01	9,59E+00	0,000	-5,17E+01
Energy ren. (net calorific value) [MJ]	2,74E+01	1,97E+01	9,98E-02	1,20E+01	6,16E-02	0,000	-4,41E+00
Water consumption [kg]	2,58E+01	1,94E+01	1,18E-01	9,73E+00	7,17E-02	0,000	-3,52E+00
Air pollution [m <sup>3</sup> ]	3,72E+02	7,76E+02	8,25E+01	7,42E+01	3,27E+01	0,000	-5,94E+02
Water pollution [m <sup>3</sup> ]	1,28E+00	1,09E+00	9,44E-02	2,97E-01	5,60E-02	0,000	-2,48E-01
Hazardous waste for disposal [kg]	2,84E-07	2,85E-07	3,35E-11	-1,53E-09	1,77E-11	0,000	4,06E-10
Disposed of non-hazardous waste [kg]	1,70E-01	1,11E-01	1,61E-03	1,48E-02	9,55E-04	0,000	4,18E-02
Disposed of radioactive waste [kg]	3,27E-03	8,31E-04	2,60E-05	3,18E-03	1,60E-05	0,000	-7,90E-04

evaluated from CML 2001, August 2016

### 1.3.32 MRP-C 13/110

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408152	MRP-C 13/110	10	4,1679	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	6,237	7,276	1,274	1,035	0,731	0,000	-4,079
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,83E-11	1,36E-11	1,60E-13	2,20E-11	9,85E-14	0,000	-7,55E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,69E-02	1,49E-02	8,48E-03	2,15E-03	1,66E-03	0,000	-1,02E-02
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	2,74E-03	2,00E-03	1,19E-03	2,50E-04	3,94E-04	0,000	-1,09E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,06E-04	2,53E-03	-5,05E-04	1,54E-04	-5,83E-04	0,000	-1,80E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,14E-06	2,84E-06	1,67E-08	2,19E-07	1,00E-08	0,000	4,89E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	8,16E+01	9,47E+01	1,73E+01	1,22E+01	1,02E+01	0,000	-5,29E+01
Energy (net calorific value) [MJ]	9,14E+01	9,73E+01	1,74E+01	2,18E+01	1,02E+01	0,000	-5,53E+01
Energy ren. (net calorific value) [MJ]	2,85E+01	2,03E+01	1,06E-01	1,27E+01	6,57E-02	0,000	-4,68E+00
Water consumption [kg]	2,73E+01	2,06E+01	1,26E-01	1,04E+01	7,64E-02	0,000	-3,85E+00
Air pollution [m <sup>3</sup> ]	3,98E+02	8,33E+02	8,80E+01	7,90E+01	3,49E+01	0,000	-6,37E+02
Water pollution [m <sup>3</sup> ]	1,36E+00	1,14E+00	1,01E-01	3,16E-01	5,97E-02	0,000	-2,64E-01
Hazardous waste for disposal [kg]	2,95E-07	2,96E-07	3,57E-11	-1,63E-09	1,88E-11	0,000	4,51E-10
Disposed of non-hazardous waste [kg]	1,82E-01	1,18E-01	1,71E-03	1,57E-02	1,02E-03	0,000	4,58E-02
Disposed of radioactive waste [kg]	3,49E-03	8,92E-04	2,77E-05	3,39E-03	1,70E-05	0,000	-8,35E-04

evaluated from CML 2001, August 2016

### 1.3.33 MRP-C 13/114

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408153	MRP-C 13/114	10	4,2031	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	6,330	7,363	1,285	1,041	0,737	0,000	-4,095
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,86E-11	1,39E-11	1,61E-13	2,21E-11	9,94E-14	0,000	-7,65E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,71E-02	1,50E-02	8,55E-03	2,16E-03	1,68E-03	0,000	-1,03E-02
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	2,77E-03	2,02E-03	1,20E-03	2,51E-04	3,98E-04	0,000	-1,10E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,01E-04	2,55E-03	-5,09E-04	1,55E-04	-5,88E-04	0,000	-1,81E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,23E-06	2,93E-06	1,69E-08	2,20E-07	1,01E-08	0,000	4,98E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	8,29E+01	9,62E+01	1,75E+01	1,23E+01	1,03E+01	0,000	-5,34E+01
Energy (net calorific value) [MJ]	9,28E+01	9,88E+01	1,76E+01	2,19E+01	1,03E+01	0,000	-5,58E+01
Energy ren. (net calorific value) [MJ]	2,86E+01	2,04E+01	1,07E-01	1,28E+01	6,62E-02	0,000	-4,74E+00
Water consumption [kg]	2,76E+01	2,08E+01	1,27E-01	1,04E+01	7,71E-02	0,000	-3,86E+00
Air pollution [m <sup>3</sup> ]	4,02E+02	8,40E+02	8,87E+01	7,94E+01	3,52E+01	0,000	-6,41E+02
Water pollution [m <sup>3</sup> ]	1,37E+00	1,16E+00	1,01E-01	3,18E-01	6,02E-02	0,000	-2,66E-01
Hazardous waste for disposal [kg]	2,99E-07	3,00E-07	3,60E-11	-1,64E-09	1,90E-11	0,000	4,46E-10
Disposed of non-hazardous waste [kg]	1,86E-01	1,19E-01	1,73E-03	1,58E-02	1,03E-03	0,000	4,82E-02
Disposed of radioactive waste [kg]	3,51E-03	9,06E-04	2,79E-05	3,41E-03	1,72E-05	0,000	-8,49E-04

evaluated from CML 2001, August 2016

### 1.3.34 MRP-C 13/125

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408154	MRP-C 13/125	10	4,3181	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	6,591	7,626	1,320	1,077	0,757	0,000	-4,189
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,98E-11	1,46E-11	1,65E-13	2,29E-11	1,02E-13	0,000	-7,94E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,76E-02	1,54E-02	8,78E-03	2,24E-03	1,72E-03	0,000	-1,06E-02
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	2,85E-03	2,07E-03	1,23E-03	2,60E-04	4,09E-04	0,000	-1,12E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,92E-04	2,63E-03	-5,23E-04	1,60E-04	-6,04E-04	0,000	-1,86E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,43E-06	3,12E-06	1,73E-08	2,27E-07	1,04E-08	0,000	5,20E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	8,65E+01	1,00E+02	1,80E+01	1,27E+01	1,05E+01	0,000	-5,49E+01
Energy (net calorific value) [MJ]	9,67E+01	1,03E+02	1,80E+01	2,26E+01	1,06E+01	0,000	-5,74E+01
Energy ren. (net calorific value) [MJ]	2,92E+01	2,07E+01	1,10E-01	1,33E+01	6,81E-02	0,000	-4,92E+00
Water consumption [kg]	2,85E+01	2,15E+01	1,30E-01	1,08E+01	7,92E-02	0,000	-3,96E+00
Air pollution [m <sup>3</sup> ]	4,16E+02	8,64E+02	9,11E+01	8,22E+01	3,61E+01	0,000	-6,58E+02
Water pollution [m <sup>3</sup> ]	1,42E+00	1,20E+00	1,04E-01	3,29E-01	6,19E-02	0,000	-2,73E-01
Hazardous waste for disposal [kg]	3,07E-07	3,08E-07	3,70E-11	-1,70E-09	1,95E-11	0,000	4,43E-10
Disposed of non-hazardous waste [kg]	1,94E-01	1,22E-01	1,77E-03	1,63E-02	1,05E-03	0,000	5,28E-02
Disposed of radioactive waste [kg]	3,63E-03	9,41E-04	2,87E-05	3,52E-03	1,76E-05	0,000	-8,86E-04

evaluated from CML 2001, August 2016



### 1.3.35 MRP-C 13/133

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408155	MRP-C 13/133	10	4,5893	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	7,005	8,207	1,403	1,157	0,805	0,000	-4,566
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,20E-11	1,54E-11	1,76E-13	2,46E-11	1,09E-13	0,000	-8,30E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,87E-02	1,65E-02	9,33E-03	2,40E-03	1,83E-03	0,000	-1,14E-02
Eutrophication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> -eq.]	3,01E-03	2,19E-03	1,31E-03	2,80E-04	4,34E-04	0,000	-1,21E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,03E-04	2,82E-03	-5,56E-04	1,72E-04	-6,42E-04	0,000	-2,00E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,62E-06	3,29E-06	1,84E-08	2,44E-07	1,10E-08	0,000	5,65E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	9,17E+01	1,06E+02	1,91E+01	1,37E+01	1,12E+01	0,000	-5,86E+01
Energy (net calorific value) [MJ]	1,03E+02	1,09E+02	1,92E+01	2,43E+01	1,12E+01	0,000	-6,12E+01
Energy ren. (net calorific value) [MJ]	3,04E+01	2,12E+01	1,17E-01	1,42E+01	7,23E-02	0,000	-5,15E+00
Water consumption [kg]	2,99E+01	2,25E+01	1,38E-01	1,16E+01	8,41E-02	0,000	-4,38E+00
Air pollution [m <sup>3</sup> ]	4,43E+02	9,26E+02	9,69E+01	8,83E+01	3,84E+01	0,000	-7,07E+02
Water pollution [m <sup>3</sup> ]	1,48E+00	1,24E+00	1,11E-01	3,53E-01	6,58E-02	0,000	-2,90E-01
Hazardous waste for disposal [kg]	3,14E-07	3,15E-07	3,93E-11	-1,82E-09	2,07E-11	0,000	5,12E-10
Disposed of non-hazardous waste [kg]	2,03E-01	1,29E-01	1,89E-03	1,76E-02	1,12E-03	0,000	5,28E-02
Disposed of radioactive waste [kg]	3,91E-03	9,87E-04	3,05E-05	3,79E-03	1,88E-05	0,000	-9,14E-04

evaluated from CML 2001, August 2016

### 1.3.36 MRP-C 13/140

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408156	MRP-C 13/140	10	4,7406	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	7,266	8,540	1,449	1,197	0,831	0,000	-4,751
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,32E-11	1,60E-11	1,82E-13	2,55E-11	1,12E-13	0,000	-8,54E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,93E-02	1,71E-02	9,64E-03	2,49E-03	1,89E-03	0,000	-1,18E-02
Eutrophication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	3,10E-03	2,26E-03	1,36E-03	2,89E-04	4,49E-04	0,000	-1,25E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,05E-04	2,93E-03	-5,74E-04	1,78E-04	-6,63E-04	0,000	-2,07E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,78E-06	3,43E-06	1,90E-08	2,53E-07	1,14E-08	0,000	5,93E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	9,51E+01	1,10E+02	1,97E+01	1,41E+01	1,16E+01	0,000	-6,07E+01
Energy (net calorific value) [MJ]	1,07E+02	1,13E+02	1,98E+01	2,52E+01	1,16E+01	0,000	-6,33E+01
Energy ren. (net calorific value) [MJ]	3,11E+01	2,15E+01	1,21E-01	1,47E+01	7,47E-02	0,000	-5,30E+00
Water consumption [kg]	3,07E+01	2,31E+01	1,43E-01	1,20E+01	8,69E-02	0,000	-4,59E+00
Air pollution [m <sup>3</sup> ]	4,58E+02	9,60E+02	1,00E+02	9,14E+01	3,97E+01	0,000	-7,33E+02
Water pollution [m <sup>3</sup> ]	1,53E+00	1,28E+00	1,14E-01	3,66E-01	6,79E-02	0,000	-3,00E-01
Hazardous waste for disposal [kg]	3,20E-07	3,21E-07	4,06E-11	-1,89E-09	2,14E-11	0,000	5,39E-10
Disposed of non-hazardous waste [kg]	2,10E-01	1,34E-01	1,95E-03	1,82E-02	1,16E-03	0,000	5,47E-02
Disposed of radioactive waste [kg]	4,05E-03	1,02E-03	3,15E-05	3,92E-03	1,94E-05	0,000	-9,38E-04

evaluated from CML 2001, August 2016

### 1.3.37 MRP-C 13/160

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408157	MRP-C 13/160	10	7,2113	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	10,270	13,506	2,204	1,987	1,265	0,000	-8,691
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	5,27E-11	2,06E-11	2,76E-13	4,22E-11	1,71E-13	0,000	-1,06E-11
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	2,88E-02	2,66E-02	1,47E-02	4,13E-03	2,87E-03	0,000	-1,95E-02
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> - eq.]	4,47E-03	3,32E-03	2,06E-03	4,80E-04	6,82E-04	0,000	-2,07E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-4,25E-04	4,58E-03	-8,74E-04	2,95E-04	-1,01E-03	0,000	-3,41E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	4,40E-06	3,84E-06	2,89E-08	4,20E-07	1,73E-08	0,000	9,78E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,31E+02	1,55E+02	3,00E+01	2,35E+01	1,76E+01	0,000	-9,46E+01
Energy (net calorific value) [MJ]	1,50E+02	1,58E+02	3,01E+01	4,18E+01	1,77E+01	0,000	-9,74E+01
Energy ren. (net calorific value) [MJ]	4,33E+01	2,52E+01	1,84E-01	2,45E+01	1,14E-01	0,000	-6,69E+00
Water consumption [kg]	4,16E+01	3,04E+01	2,17E-01	1,99E+01	1,32E-01	0,000	-9,04E+00
Air pollution [m <sup>3</sup> ]	6,93E+02	1,53E+03	1,52E+02	1,52E+02	6,03E+01	0,000	-1,20E+03
Water pollution [m <sup>3</sup> ]	2,00E+00	1,58E+00	1,74E-01	6,07E-01	1,03E-01	0,000	-4,62E-01
Hazardous waste for disposal [kg]	3,49E-07	3,51E-07	6,17E-11	-3,13E-09	3,26E-11	0,000	1,41E-09
Disposed of non-hazardous waste [kg]	2,52E-01	1,99E-01	2,96E-03	3,02E-02	1,76E-03	0,000	1,88E-02
Disposed of radioactive waste [kg]	6,90E-03	1,31E-03	4,79E-05	6,51E-03	2,95E-05	0,000	-9,87E-04

evaluated from CML 2001, August 2016

### 1.3.38 MRP-C 13/168

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2408158	MRP-C 13/168	6	4,6983	Steel, Polymer, Cardboard

Environmental impact category	Total	Raw material acquisition	Transport to production	Production	Transport to consumer	Use	End of life
Global Warming Potential (GWP 100 years) [kg CO <sub>2</sub> -eq.]	6,545	8,178	1,436	1,224	0,824	0,000	-5,117
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,24E-11	1,35E-11	1,80E-13	2,60E-11	1,11E-13	0,000	-7,42E-12
Acidification Potential (AP) [kg SO <sub>2</sub> -eq.]	1,89E-02	1,69E-02	9,56E-03	2,54E-03	1,87E-03	0,000	-1,20E-02
Eutrication Potential (EP) [kg (PO <sub>4</sub> ) <sup>3-</sup> -eq.]	3,02E-03	2,22E-03	1,34E-03	2,96E-04	4,45E-04	0,000	-1,28E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-3,00E-04	2,86E-03	-5,69E-04	1,82E-04	-6,57E-04	0,000	-2,11E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,87E-06	2,53E-06	1,88E-08	2,59E-07	1,13E-08	0,000	5,64E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	8,42E+01	9,87E+01	1,96E+01	1,45E+01	1,15E+01	0,000	-5,99E+01
Energy (net calorific value) [MJ]	9,61E+01	1,01E+02	1,96E+01	2,58E+01	1,15E+01	0,000	-6,21E+01
Energy ren. (net calorific value) [MJ]	3,20E+01	2,14E+01	1,20E-01	1,51E+01	7,41E-02	0,000	-4,65E+00
Water consumption [kg]	2,92E+01	2,17E+01	1,42E-01	1,23E+01	8,61E-02	0,000	-4,98E+00
Air pollution [m <sup>3</sup> ]	4,44E+02	9,59E+02	9,92E+01	9,35E+01	3,93E+01	0,000	-7,47E+02
Water pollution [m <sup>3</sup> ]	1,42E+00	1,17E+00	1,13E-01	3,74E-01	6,73E-02	0,000	-2,98E-01
Hazardous waste for disposal [kg]	2,92E-07	2,93E-07	4,02E-11	-1,93E-09	2,12E-11	0,000	7,41E-10
Disposed of non-hazardous waste [kg]	1,76E-01	1,31E-01	1,93E-03	1,86E-02	1,15E-03	0,000	2,28E-02
Disposed of radioactive waste [kg]	4,22E-03	9,05E-04	3,12E-05	4,01E-03	1,92E-05	0,000	-7,49E-04

evaluated from CML 2001, August 2016