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Environmental report

„MP-U (01)“

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1 Life Cycle Assessment „HILTI_MP_U (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
2242334	MP-U 13-17 1/4" M8/10	25	0,878	Steel, Polymer
2242335	MP-U 16-20 3/8" M8/10	25	0,918	Steel, Polymer
2242336	MP-U 20-24 1/2" M8/10	25	0,971	Steel, Polymer
2242337	MP-U 25-29 3/4" M8/10	25	1,040	Steel, Polymer
2242338	MP-U 30-34 1" M8/10	25	1,108	Steel, Polymer
2242339	MP-U 34-38 M8/10	25	1,163	Steel, Polymer
2242340	MP-U 38-42 M8/10	25	1,228	Steel, Polymer
2242341	MP-U 42-47 1 1/4" M8/10	25	1,319	Steel, Polymer
2242342	MP-U 47-52 1 1/2" M8/10	25	1,381	Steel, Polymer
2242343	MP-U 52-57 M8/10	25	1,449	Steel, Polymer
2242344	MP-U 57-62 2" M8/10	10	0,613	Steel, Polymer
2242345	MP-U 62-67 M8/10	10	0,689	Steel, Polymer
2242346	MP-U 67-72 M8/10	10	1,167	Steel, Polymer
2242347	MP-U 72-77 2 1/2" M8/10	10	1,215	Steel, Polymer
2242348	MP-U 77-82 M8/10	10	1,263	Steel, Polymer
2242349	MP-U 83-89 3" M8/10	10	1,331	Steel, Polymer
2242350	MP-U 89-95 M8/10	10	1,389	Steel, Polymer
2242351	MP-U 95-101 M8/10	10	1,447	Steel, Polymer
2242352	MP-U 102-108 M8/10	10	1,925	Steel, Polymer
2242353	MP-U 109-115 4" M8/10	10	2,017	Steel, Polymer
2242354	MP-U 115-121 M8/10	10	2,087	Steel, Polymer
2242355	MP-U 121-127 M8/10	10	2,156	Steel, Polymer
2242356	MP-U 128-134 M8/10	10	2,237	Steel, Polymer
2242357	MP-U 135-141 5" M8/10	10	2,318	Steel, Polymer
2305351	MP-U 141-147 M8/10	10	2,399	Steel, Polymer
2305352	MP-U 147-153 M8/10	10	2,714	Steel, Polymer
2305353	MP-U 153-159 M8/10	10	2,790	Steel, Polymer
2305354	MP-U 160-166 6" M8/10	10	2,880	Steel, Polymer
2305355	MP-U 166-172 M8/10	10	2,956	Steel, Polymer
2305356	MP-U 170-176 M8/10	10	3,007	Steel, Polymer
2242359	MP-U 13-17 1/4" M8/10/1/2"	25	1,826	Steel, Polymer
2242360	MP-U 16-20 3/8" M8/10/1/2"	25	1,866	Steel, Polymer
2242361	MP-U 20-24 1/2" M8/10/1/2"	25	1,920	Steel, Polymer

Table 1.2: Technical data and material distribution

IT- Number	Product name	Pcs. per salespack	Weight [kg]	Material
2242362	MP-U 25-29 3/4" M8/10/1/2"	25	2,000	Steel, Polymer
2242363	MP-U 30-34 1" M8/10/1/2"	25	2,068	Steel, Polymer
2242364	MP-U 34-38 M8/10/1/2"	25	2,122	Steel, Polymer
2242365	MP-U 38-42 M8/10/1/2"	25	2,177	Steel, Polymer
2242366	MP-U 42-47 1 1/4" M8/10/1/2"	25	2,267	Steel, Polymer
2242367	MP-U 47-52 1 1/2" M8/10/1/2"	25	2,329	Steel, Polymer
2242368	MP-U 52-57 M8/10/1/2"	25	2,398	Steel, Polymer
2242369	MP-U 57-62 2" M8/10/1/2"	10	1,003	Steel, Polymer
2242370	MP-U 62-67 M8/10/1/2"	10	1,030	Steel, Polymer
2242371	MP-U 67-72 M8/10/1/2"	10	1,546	Steel, Polymer
2242372	MP-U 72-77 2 1/2" M8/10/1/2"	10	1,594	Steel, Polymer
2242373	MP-U 77-82 M8/10/1/2"	10	1,642	Steel, Polymer
2242374	MP-U 83-89 3" M8/10/1/2"	10	1,711	Steel, Polymer
2242375	MP-U 89-95 M8/10/1/2"	10	1,769	Steel, Polymer
2242376	MP-U 95-101 M8/10/1/2"	10	1,826	Steel, Polymer
2242377	MP-U 102-108 M8/10/1/2"	10	2,304	Steel, Polymer
2242378	MP-U 109-115 4" M8/10/1/2"	10	2,397	Steel, Polymer
2242379	MP-U 115-121 M8/10/1/2"	10	2,466	Steel, Polymer
2242380	MP-U 121-127 M8/10/1/2"	10	2,535	Steel, Polymer
2242235	MP-U 128-134 M8/10/1/2"	10	2,616	Steel, Polymer
2242332	MP-U 135-141 5" M8/10/1/2"	10	2,697	Steel, Polymer
2305357	MP-U 141-147 M8/10/1/2"	10	2,766	Steel, Polymer
2305358	MP-U 147-153 M8/10/1/2"	10	3,094	Steel, Polymer
2305359	MP-U 153-159 M8/10/1/2"	10	3,170	Steel, Polymer
2305360	MP-U 160-166 6" M8/10/1/2"	10	3,259	Steel, Polymer
2305361	MP-U 166-172 M8/10/1/2"	10	3,335	Steel, Polymer
2305362	MP-U 170-176 M8/10/1/2"	10	3,387	Steel, Polymer

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 (MP-U (01)), which considers the entire life cycle of the product (cradle to grave). The accounting data come from the source: GaBi 10, and are evaluated from IPCC 2001, April. 2015.

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

- Raw material,
- Production,
- Use,
- End of life,
- Transportation.

The data of the “Raw material” distribution of the product is derived from a dismantling and disassembling analysis, that was already carried out by an external partner.

Each material, which is defined in the dismantling and disassembling analysis is specifically assigned to one or several “Production” processes in order to describe the process as closely as possible.

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 polymers.

The “Transportation” scenario is based on the 2009 Limit Stretch study by PE International, and is evaluated according to the weight of the product. The first transport reflects the transport 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).

The second transport 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 emissions of both transports are added together in this report.

1.3 Life Cycle Assessment

1.3.1 MP-U 13-17 1/4" M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242334	MP-U 13-17 1/4" M8/10	25	0,878	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	0,967	1,999	0,070	0,000	-1,496	0,394
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,46E-15	2,67E-15	2,07E-15	0,00E+00	-1,35E-15	6,40E-17
Acidification Potential (AP) [kg SO ₂ -eq.]	4,18E-03	4,44E-03	1,47E-04	0,00E+00	-3,58E-03	3,17E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ -eq.]	7,61E-04	4,28E-04	1,63E-05	0,00E+00	-3,33E-04	6,49E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-7,90E-04	6,15E-04	1,06E-05	0,00E+00	-5,35E-04	-8,81E-04
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	8,28E-08	2,95E-08	2,32E-08	0,00E+00	-8,64E-10	3,10E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,18E+01	1,89E+01	7,99E-01	0,00E+00	-1,32E+01	5,36E+00
Energy (net calorific value) [MJ]	1,26E+01	1,92E+01	1,27E+00	0,00E+00	-1,33E+01	5,38E+00
Energy ren. (net calorific value) [MJ]	1,16E+00	8,23E-01	5,51E-01	0,00E+00	-4,88E-01	2,78E-01
Water consumption [kg]	1,07E+00	1,91E+00	6,42E-01	0,00E+00	-1,80E+00	3,23E-01
Air pollution [m ³]	5,79E+01	2,05E+02	4,52E+00	0,00E+00	-1,81E+02	2,88E+01
Water pollution [m ³]	1,33E-01	1,01E-01	1,83E-02	0,00E+00	-7,01E-02	8,42E-02
Hazardous waste for disposal [kg]	2,34E-07	1,46E-08	5,22E-10	0,00E+00	-1,04E-08	2,30E-07
Disposed of non-hazardous waste [kg]	6,24E-03	2,22E-02	8,88E-04	0,00E+00	-1,77E-02	8,01E-04
Disposed of radioactive waste [kg]	2,55E-04	1,02E-04	1,89E-04	0,00E+00	-4,18E-05	6,61E-06

evaluated from CML 2001, April. 2015

1.3.2 MP-U 16-20 3/8" M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242335	MP-U 16-20 3/8" M8/10	25	0,918	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	1,007	2,091	0,071	0,000	-1,568	0,412
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,57E-15	2,79E-15	2,10E-15	0,00E+00	-1,40E-15	6,69E-17
Acidification Potential (AP) [kg SO ₂ -eq.]	4,36E-03	4,65E-03	1,49E-04	0,00E+00	-3,74E-03	3,32E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	7,95E-04	4,48E-04	1,65E-05	0,00E+00	-3,48E-04	6,79E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-8,27E-04	6,43E-04	1,07E-05	0,00E+00	-5,60E-04	-9,21E-04
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	8,56E-08	3,03E-08	2,35E-08	0,00E+00	-6,74E-10	3,24E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,23E+01	1,97E+01	8,09E-01	0,00E+00	-1,38E+01	5,61E+00
Energy (net calorific value) [MJ]	1,31E+01	2,00E+01	1,29E+00	0,00E+00	-1,39E+01	5,63E+00
Energy ren. (net calorific value) [MJ]	1,20E+00	8,61E-01	5,58E-01	0,00E+00	-5,06E-01	2,91E-01
Water consumption [kg]	1,06E+00	1,96E+00	6,50E-01	0,00E+00	-1,89E+00	3,38E-01
Air pollution [m ³]	6,02E+01	2,14E+02	4,58E+00	0,00E+00	-1,89E+02	3,01E+01
Water pollution [m ³]	1,39E-01	1,06E-01	1,85E-02	0,00E+00	-7,32E-02	8,80E-02
Hazardous waste for disposal [kg]	2,45E-07	1,52E-08	5,28E-10	0,00E+00	-1,09E-08	2,40E-07
Disposed of non-hazardous waste [kg]	6,50E-03	2,32E-02	8,99E-04	0,00E+00	-1,85E-02	8,37E-04
Disposed of radioactive waste [kg]	2,62E-04	1,06E-04	1,91E-04	0,00E+00	-4,21E-05	6,91E-06

evaluated from CML 2001, April. 2015

1.3.3 MP-U 20-24 1/2" M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242336	MP-U 20-24 1/2" M8/10	25	0,971	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	1,060	2,215	0,073	0,000	-1,664	0,437
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,71E-15	2,96E-15	2,13E-15	0,000	-1,46E-15	7,08E-17
Acidification Potential (AP) [kg SO ₂ -eq.]	4,61E-03	4,92E-03	1,51E-04	0,000	-3,97E-03	3,51E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	8,41E-04	4,74E-04	1,67E-05	0,000	-3,69E-04	7,18E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-8,77E-04	6,80E-04	1,09E-05	0,000	-5,93E-04	-9,75E-04
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	8,93E-08	3,15E-08	2,39E-08	0,000	-4,21E-10	3,43E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,30E+01	2,08E+01	8,22E-01	0,000	-1,46E+01	5,94E+00
Energy (net calorific value) [MJ]	1,37E+01	2,12E+01	1,31E+00	0,000	-1,47E+01	5,96E+00
Energy ren. (net calorific value) [MJ]	1,26E+00	9,12E-01	5,67E-01	0,000	-5,31E-01	3,08E-01
Water consumption [kg]	1,05E+00	2,03E+00	6,61E-01	0,000	-2,00E+00	3,58E-01
Air pollution [m ³]	6,33E+01	2,27E+02	4,66E+00	0,000	-2,00E+02	3,19E+01
Water pollution [m ³]	1,46E-01	1,12E-01	1,88E-02	0,000	-7,73E-02	9,32E-02
Hazardous waste for disposal [kg]	2,59E-07	1,61E-08	5,37E-10	0,000	-1,15E-08	2,54E-07
Disposed of non-hazardous waste [kg]	6,85E-03	2,46E-02	9,14E-04	0,000	-1,96E-02	8,86E-04
Disposed of radioactive waste [kg]	2,72E-04	1,13E-04	1,94E-04	0,000	-4,26E-05	7,31E-06

evaluated from CML 2001, April. 2015

1.3.4 MP-U 25-29 3/4" M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242337	MP-U 25-29 3/4" M8/10	25	1,040	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	1,129	2,375	0,074	0,000	-1,787	0,468
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,90E-15	3,18E-15	2,18E-15	0,000	-1,53E-15	7,58E-17
Acidification Potential (AP) [kg SO ₂ -eq.]	4,92E-03	5,27E-03	1,54E-04	0,000	-4,25E-03	3,76E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	9,00E-04	5,09E-04	1,71E-05	0,000	-3,95E-04	7,70E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-9,41E-04	7,28E-04	1,11E-05	0,000	-6,36E-04	-1,04E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	9,40E-08	3,30E-08	2,44E-08	0,000	-9,37E-11	3,67E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,38E+01	2,22E+01	8,39E-01	0,000	-1,56E+01	6,36E+00
Energy (net calorific value) [MJ]	1,46E+01	2,26E+01	1,34E+00	0,000	-1,57E+01	6,38E+00
Energy ren. (net calorific value) [MJ]	1,32E+00	9,77E-01	5,79E-01	0,000	-5,62E-01	3,30E-01
Water consumption [kg]	1,03E+00	2,12E+00	6,75E-01	0,000	-2,15E+00	3,83E-01
Air pollution [m ³]	6,73E+01	2,43E+02	4,76E+00	0,000	-2,15E+02	3,41E+01
Water pollution [m ³]	1,56E-01	1,20E-01	1,92E-02	0,000	-8,26E-02	9,98E-02
Hazardous waste for disposal [kg]	2,77E-07	1,71E-08	5,48E-10	0,000	-1,23E-08	2,72E-07
Disposed of non-hazardous waste [kg]	7,29E-03	2,64E-02	9,34E-04	0,000	-2,10E-02	9,49E-04
Disposed of radioactive waste [kg]	2,84E-04	1,21E-04	1,98E-04	0,000	-4,31E-05	7,83E-06

evaluated from CML 2001, April. 2015

1.3.5 MP-U 30-34 1" M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242338	MP-U 30-34 1" M8/10	25	1,108	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	1,197	2,532	0,076	0,000	-1,908	0,498
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	4,09E-15	3,39E-15	2,23E-15	0,00E+00	-1,61E-15	8,08E-17
Acidification Potential (AP) [kg SO ₂ -eq.]	5,24E-03	5,61E-03	1,58E-04	0,00E+00	-4,53E-03	4,00E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	9,58E-04	5,42E-04	1,74E-05	0,00E+00	-4,21E-04	8,20E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,00E-03	7,75E-04	1,14E-05	0,00E+00	-6,79E-04	-1,11E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	9,87E-08	3,44E-08	2,49E-08	0,00E+00	2,28E-10	3,91E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,46E+01	2,36E+01	8,57E-01	0,00E+00	-1,66E+01	6,77E+00
Energy (net calorific value) [MJ]	1,55E+01	2,40E+01	1,37E+00	0,00E+00	-1,67E+01	6,79E+00
Energy ren. (net calorific value) [MJ]	1,39E+00	1,04E+00	5,91E-01	0,00E+00	-5,92E-01	3,52E-01
Water consumption [kg]	1,01E+00	2,21E+00	6,89E-01	0,00E+00	-2,30E+00	4,08E-01
Air pollution [m ³]	7,12E+01	2,59E+02	4,85E+00	0,00E+00	-2,29E+02	3,64E+01
Water pollution [m ³]	1,65E-01	1,27E-01	1,96E-02	0,00E+00	-8,79E-02	1,06E-01
Hazardous waste for disposal [kg]	2,95E-07	1,82E-08	5,60E-10	0,00E+00	-1,32E-08	2,90E-07
Disposed of non-hazardous waste [kg]	7,73E-03	2,82E-02	9,53E-04	0,00E+00	-2,24E-02	1,01E-03
Disposed of radioactive waste [kg]	2,96E-04	1,29E-04	2,02E-04	0,00E+00	-4,37E-05	8,34E-06

evaluated from CML 2001, April. 2015

1.3.6 MP-U 34-38 M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242339	MP-U 34-38 M8/10	25	1,163	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	1,251	2,657	0,077	0,000	-2,005	0,522
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	4,23E-15	3,56E-15	2,26E-15	0,00E+00	-1,67E-15	8,47E-17
Acidification Potential (AP) [kg SO ₂ -eq.]	5,48E-03	5,88E-03	1,60E-04	0,00E+00	-4,76E-03	4,20E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	1,00E-03	5,69E-04	1,77E-05	0,00E+00	-4,42E-04	8,60E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,05E-03	8,13E-04	1,15E-05	0,00E+00	-7,12E-04	-1,17E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,02E-07	3,56E-08	2,53E-08	0,00E+00	4,85E-10	4,10E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,53E+01	2,47E+01	8,70E-01	0,00E+00	-1,74E+01	7,11E+00
Energy (net calorific value) [MJ]	1,62E+01	2,52E+01	1,39E+00	0,00E+00	-1,75E+01	7,13E+00
Energy ren. (net calorific value) [MJ]	1,44E+00	1,09E+00	6,01E-01	0,00E+00	-6,17E-01	3,69E-01
Water consumption [kg]	1,00E+00	2,29E+00	7,00E-01	0,00E+00	-2,41E+00	4,28E-01
Air pollution [m ³]	7,43E+01	2,71E+02	4,93E+00	0,00E+00	-2,40E+02	3,82E+01
Water pollution [m ³]	1,73E-01	1,34E-01	1,99E-02	0,00E+00	-9,21E-02	1,12E-01
Hazardous waste for disposal [kg]	3,10E-07	1,90E-08	5,69E-10	0,00E+00	-1,38E-08	3,04E-07
Disposed of non-hazardous waste [kg]	8,08E-03	2,96E-02	9,68E-04	0,00E+00	-2,36E-02	1,06E-03
Disposed of radioactive waste [kg]	3,06E-04	1,36E-04	2,06E-04	0,00E+00	-4,41E-05	8,75E-06

evaluated from CML 2001, April. 2015

1.3.7 MP-U 38-42 M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242340	MP-U 38-42 M8/10	25	1,228	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	1,356	2,806	0,082	0,000	-2,084	0,552
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	4,29E-15	3,73E-15	2,40E-15	0,00E+00	-1,93E-15	8,95E-17
Acidification Potential (AP) [kg SO ₂ -eq.]	5,85E-03	6,25E-03	1,70E-04	0,00E+00	-5,00E-03	4,44E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	1,06E-03	6,02E-04	1,88E-05	0,00E+00	-4,65E-04	9,08E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,10E-03	8,63E-04	1,23E-05	0,00E+00	-7,48E-04	-1,23E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,08E-07	3,94E-08	2,69E-08	0,00E+00	-1,87E-09	4,34E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,66E+01	2,66E+01	9,27E-01	0,00E+00	-1,85E+01	7,51E+00
Energy (net calorific value) [MJ]	1,75E+01	2,71E+01	1,48E+00	0,00E+00	-1,86E+01	7,53E+00
Energy ren. (net calorific value) [MJ]	1,49E+00	1,16E+00	6,37E-01	0,00E+00	-6,94E-01	3,90E-01
Water consumption [kg]	1,41E+00	2,74E+00	7,42E-01	0,00E+00	-2,52E+00	4,52E-01
Air pollution [m ³]	8,04E+01	2,87E+02	5,23E+00	0,00E+00	-2,52E+02	4,03E+01
Water pollution [m ³]	1,81E-01	1,40E-01	2,11E-02	0,00E+00	-9,84E-02	1,18E-01
Hazardous waste for disposal [kg]	3,27E-07	1,99E-08	6,05E-10	0,00E+00	-1,46E-08	3,21E-07
Disposed of non-hazardous waste [kg]	8,50E-03	3,10E-02	1,03E-03	0,00E+00	-2,47E-02	1,12E-03
Disposed of radioactive waste [kg]	3,07E-04	1,42E-04	2,18E-04	0,00E+00	-6,26E-05	9,24E-06

evaluated from CML 2001, April. 2015

1.3.8 MP-U 42-47 1 ¼" M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242341	MP-U 42-47 1 ¼" M8/10	25	1,319	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	1,448	3,012	0,090	0,000	-2,246	0,593
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	4,70E-15	4,00E-15	2,64E-15	0,00E+00	-2,03E-15	9,61E-17
Acidification Potential (AP) [kg SO ₂ -eq.]	6,28E-03	6,70E-03	1,87E-04	0,00E+00	-5,38E-03	4,76E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	1,14E-03	6,46E-04	2,07E-05	0,00E+00	-5,00E-04	9,75E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,19E-03	9,26E-04	1,35E-05	0,00E+00	-8,04E-04	-1,32E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,16E-07	4,11E-08	2,96E-08	0,00E+00	-1,44E-09	4,66E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,77E+01	2,84E+01	1,02E+00	0,00E+00	-1,98E+01	8,06E+00
Energy (net calorific value) [MJ]	1,87E+01	2,90E+01	1,62E+00	0,00E+00	-2,00E+01	8,09E+00
Energy ren. (net calorific value) [MJ]	1,62E+00	1,24E+00	7,01E-01	0,00E+00	-7,35E-01	4,18E-01
Water consumption [kg]	1,47E+00	2,88E+00	8,16E-01	0,00E+00	-2,71E+00	4,86E-01
Air pollution [m ³]	8,61E+01	3,08E+02	5,76E+00	0,00E+00	-2,71E+02	4,33E+01
Water pollution [m ³]	1,94E-01	1,50E-01	2,32E-02	0,00E+00	-1,05E-01	1,27E-01
Hazardous waste for disposal [kg]	3,51E-07	2,13E-08	6,65E-10	0,00E+00	-1,56E-08	3,45E-07
Disposed of non-hazardous waste [kg]	9,12E-03	3,33E-02	1,13E-03	0,00E+00	-2,66E-02	1,20E-03
Disposed of radioactive waste [kg]	3,39E-04	1,52E-04	2,40E-04	0,00E+00	-6,34E-05	9,93E-06

evaluated from CML 2001, April. 2015

1.3.9 MP-U 47-52 1 ½" M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242342	MP-U 47-52 1 ½" M8/10	25	1,381	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	1,510	3,155	0,091	0,000	-2,357	0,621
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	4,87E-15	4,20E-15	2,68E-15	0,00E+00	-2,10E-15	1,01E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	6,56E-03	7,02E-03	1,90E-04	0,00E+00	-5,63E-03	4,99E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	1,20E-03	6,76E-04	2,10E-05	0,00E+00	-5,24E-04	1,02E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,25E-03	9,69E-04	1,37E-05	0,00E+00	-8,43E-04	-1,39E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,20E-07	4,24E-08	3,00E-08	0,00E+00	-1,15E-09	4,88E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,85E+01	2,97E+01	1,03E+00	0,00E+00	-2,07E+01	8,44E+00
Energy (net calorific value) [MJ]	1,95E+01	3,03E+01	1,65E+00	0,00E+00	-2,09E+01	8,47E+00
Energy ren. (net calorific value) [MJ]	1,68E+00	1,30E+00	7,12E-01	0,00E+00	-7,63E-01	4,38E-01
Water consumption [kg]	1,46E+00	2,96E+00	8,28E-01	0,00E+00	-2,84E+00	5,09E-01
Air pollution [m ³]	8,97E+01	3,23E+02	5,84E+00	0,00E+00	-2,84E+02	4,53E+01
Water pollution [m ³]	2,03E-01	1,57E-01	2,36E-02	0,00E+00	-1,10E-01	1,32E-01
Hazardous waste for disposal [kg]	3,68E-07	2,22E-08	6,75E-10	0,00E+00	-1,64E-08	3,61E-07
Disposed of non-hazardous waste [kg]	9,52E-03	3,50E-02	1,15E-03	0,00E+00	-2,78E-02	1,26E-03
Disposed of radioactive waste [kg]	3,50E-04	1,60E-04	2,44E-04	0,00E+00	-6,39E-05	1,04E-05

evaluated from CML 2001, April. 2015

1.3.10 MP-U 52-57 M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242343	MP-U 52-57 M8/10	25	1,449	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	1,578	3,313	0,093	0,000	-2,479	0,651
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	5,06E-15	4,41E-15	2,72E-15	0,00E+00	-2,18E-15	1,06E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	6,87E-03	7,36E-03	1,93E-04	0,00E+00	-5,92E-03	5,23E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ -eq.]	1,25E-03	7,10E-04	2,14E-05	0,00E+00	-5,50E-04	1,07E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,31E-03	1,02E-03	1,39E-05	0,00E+00	-8,85E-04	-1,45E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,25E-07	4,39E-08	3,05E-08	0,00E+00	-8,21E-10	5,12E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,93E+01	3,11E+01	1,05E+00	0,00E+00	-2,17E+01	8,86E+00
Energy (net calorific value) [MJ]	2,04E+01	3,17E+01	1,67E+00	0,00E+00	-2,19E+01	8,89E+00
Energy ren. (net calorific value) [MJ]	1,75E+00	1,36E+00	7,24E-01	0,00E+00	-7,94E-01	4,60E-01
Water consumption [kg]	1,44E+00	3,05E+00	8,42E-01	0,00E+00	-2,99E+00	5,34E-01
Air pollution [m ³]	9,37E+01	3,39E+02	5,94E+00	0,00E+00	-2,99E+02	4,76E+01
Water pollution [m ³]	2,13E-01	1,65E-01	2,40E-02	0,00E+00	-1,15E-01	1,39E-01
Hazardous waste for disposal [kg]	3,86E-07	2,33E-08	6,86E-10	0,00E+00	-1,72E-08	3,79E-07
Disposed of non-hazardous waste [kg]	9,96E-03	3,67E-02	1,17E-03	0,00E+00	-2,93E-02	1,32E-03
Disposed of radioactive waste [kg]	3,62E-04	1,68E-04	2,48E-04	0,00E+00	-6,44E-05	1,09E-05

evaluated from CML 2001, April. 2015

1.3.11 MP-U 57-62 2" M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242344	MP-U 57-62 2" M8/10	10	0,613	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	0,684	1,400	0,040	0,000	-1,031	0,275
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,05E-15	1,85E-15	1,16E-15	0,00E+00	-1,00E-15	4,46E-17
Acidification Potential (AP) [kg SO ₂ -eq.]	2,93E-03	3,13E-03	8,21E-05	0,00E+00	-2,49E-03	2,21E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	5,31E-04	3,00E-04	9,09E-06	0,00E+00	-2,31E-04	4,53E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-5,49E-04	4,32E-04	5,92E-06	0,00E+00	-3,72E-04	-6,15E-04
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	5,26E-08	1,94E-08	1,30E-08	0,00E+00	-1,50E-09	2,16E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	8,37E+00	1,34E+01	4,49E-01	0,00E+00	-9,22E+00	3,74E+00
Energy (net calorific value) [MJ]	8,82E+00	1,37E+01	7,14E-01	0,00E+00	-9,31E+00	3,76E+00
Energy ren. (net calorific value) [MJ]	7,23E-01	5,77E-01	3,08E-01	0,00E+00	-3,56E-01	1,94E-01
Water consumption [kg]	7,83E-01	1,45E+00	3,58E-01	0,00E+00	-1,25E+00	2,26E-01
Air pollution [m ³]	4,05E+01	1,43E+02	2,53E+00	0,00E+00	-1,25E+02	2,01E+01
Water pollution [m ³]	8,89E-02	6,92E-02	1,02E-02	0,00E+00	-4,93E-02	5,88E-02
Hazardous waste for disposal [kg]	1,63E-07	9,75E-09	2,93E-10	0,00E+00	-7,26E-09	1,60E-07
Disposed of non-hazardous waste [kg]	4,20E-03	1,54E-02	4,97E-04	0,00E+00	-1,23E-02	5,59E-04
Disposed of radioactive waste [kg]	1,45E-04	7,04E-05	1,05E-04	0,00E+00	-3,50E-05	4,61E-06

evaluated from CML 2001, April. 2015

1.3.12 MP-U 62-67 M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242345	MP-U 62-67 M8/10	10	0,689	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	0,769	1,555	0,072	0,000	-1,168	0,310
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,10E-15	2,01E-15	2,13E-15	0,00E+00	-1,09E-15	5,02E-17
Acidification Potential (AP) [kg SO ₂ -eq.]	3,32E-03	3,49E-03	1,51E-04	0,00E+00	-2,81E-03	2,49E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	5,99E-04	3,34E-04	1,67E-05	0,00E+00	-2,61E-04	5,10E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-6,14E-04	4,85E-04	1,09E-05	0,00E+00	-4,19E-04	-6,91E-04
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	6,68E-08	1,98E-08	2,38E-08	0,00E+00	-1,14E-09	2,43E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	9,36E+00	1,47E+01	8,20E-01	0,00E+00	-1,04E+01	4,21E+00
Energy (net calorific value) [MJ]	1,00E+01	1,50E+01	1,31E+00	0,00E+00	-1,04E+01	4,23E+00
Energy ren. (net calorific value) [MJ]	1,03E+00	6,34E-01	5,65E-01	0,00E+00	-3,91E-01	2,19E-01
Water consumption [kg]	1,16E+00	1,66E+00	6,57E-01	0,00E+00	-1,41E+00	2,54E-01
Air pollution [m ³]	4,73E+01	1,61E+02	4,64E+00	0,00E+00	-1,41E+02	2,26E+01
Water pollution [m ³]	1,06E-01	7,64E-02	1,87E-02	0,00E+00	-5,52E-02	6,61E-02
Hazardous waste for disposal [kg]	1,83E-07	1,08E-08	5,35E-10	0,00E+00	-8,17E-09	1,80E-07
Disposed of non-hazardous waste [kg]	4,90E-03	1,72E-02	9,10E-04	0,00E+00	-1,39E-02	6,29E-04
Disposed of radioactive waste [kg]	2,40E-04	7,74E-05	1,93E-04	0,00E+00	-3,56E-05	5,19E-06

evaluated from CML 2001, April. 2015

1.3.13 MP-U 67-72 M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242346	MP-U 67-72 M8/10	10	1,167	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	1,393	2,412	0,434	0,000	-1,978	0,524
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,37E-14	2,66E-15	1,28E-14	0,00E+00	-1,84E-15	8,50E-17
Acidification Potential (AP) [kg SO ₂ -eq.]	6,00E-03	5,63E-03	9,07E-04	0,00E+00	-4,75E-03	4,21E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	1,04E-03	5,20E-04	1,00E-04	0,00E+00	-4,41E-04	8,63E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-9,86E-04	8,29E-04	6,53E-05	0,00E+00	-7,10E-04	-1,17E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,04E-07	2,12E-08	1,43E-07	0,00E+00	-1,90E-09	4,12E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,65E+01	2,20E+01	4,92E+00	0,00E+00	-1,75E+01	7,13E+00
Energy (net calorific value) [MJ]	1,97E+01	2,24E+01	7,85E+00	0,00E+00	-1,77E+01	7,15E+00
Energy ren. (net calorific value) [MJ]	4,03E+00	9,20E-01	3,40E+00	0,00E+00	-6,61E-01	3,70E-01
Water consumption [kg]	5,88E+00	3,88E+00	3,96E+00	0,00E+00	-2,39E+00	4,30E-01
Air pollution [m ³]	1,03E+02	2,77E+02	2,80E+01	0,00E+00	-2,40E+02	3,83E+01
Water pollution [m ³]	2,45E-01	1,14E-01	1,13E-01	0,00E+00	-9,35E-02	1,12E-01
Hazardous waste for disposal [kg]	3,11E-07	1,68E-08	3,22E-09	0,00E+00	-1,38E-08	3,05E-07
Disposed of non-hazardous waste [kg]	1,04E-02	2,73E-02	5,48E-03	0,00E+00	-2,34E-02	1,06E-03
Disposed of radioactive waste [kg]	1,22E-03	1,10E-04	1,16E-03	0,00E+00	-6,02E-05	8,78E-06

evaluated from CML 2001, April. 2015

1.3.14 MP-U 72-77 2 ½" M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242347	MP-U 72-77 2 ½" M8/10	10	1,215	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	1,446	2,510	0,454	0,000	-2,064	0,546
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,43E-14	2,77E-15	1,34E-14	0,00E+00	-1,90E-15	8,85E-17
Acidification Potential (AP) [kg SO ₂ -eq.]	6,24E-03	5,85E-03	9,48E-04	0,00E+00	-4,95E-03	4,39E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	1,08E-03	5,41E-04	1,05E-04	0,00E+00	-4,60E-04	8,99E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,03E-03	8,63E-04	6,82E-05	0,00E+00	-7,40E-04	-1,22E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,13E-07	2,14E-08	1,50E-07	0,00E+00	-1,67E-09	4,29E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,71E+01	2,28E+01	5,14E+00	0,00E+00	-1,83E+01	7,42E+00
Energy (net calorific value) [MJ]	2,04E+01	2,32E+01	8,21E+00	0,00E+00	-1,84E+01	7,45E+00
Energy ren. (net calorific value) [MJ]	4,21E+00	9,56E-01	3,56E+00	0,00E+00	-6,83E-01	3,85E-01
Water consumption [kg]	6,11E+00	4,01E+00	4,14E+00	0,00E+00	-2,49E+00	4,48E-01
Air pollution [m ³]	1,08E+02	2,88E+02	2,93E+01	0,00E+00	-2,50E+02	3,99E+01
Water pollution [m ³]	2,55E-01	1,18E-01	1,18E-01	0,00E+00	-9,72E-02	1,17E-01
Hazardous waste for disposal [kg]	3,24E-07	1,75E-08	3,36E-09	0,00E+00	-1,44E-08	3,18E-07
Disposed of non-hazardous waste [kg]	1,08E-02	2,84E-02	5,73E-03	0,00E+00	-2,44E-02	1,11E-03
Disposed of radioactive waste [kg]	1,28E-03	1,14E-04	1,22E-03	0,00E+00	-6,06E-05	9,14E-06

evaluated from CML 2001, April. 2015

1.3.15 MP-U 77-82 M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242348	MP-U 77-82 M8/10	10	1,263	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	1,499	2,608	0,474	0,000	-2,150	0,568
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,50E-14	2,87E-15	1,40E-14	0,00E+00	-1,95E-15	9,20E-17
Acidification Potential (AP) [kg SO ₂ -eq.]	6,48E-03	6,08E-03	9,89E-04	0,00E+00	-5,15E-03	4,56E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	1,13E-03	5,62E-04	1,09E-04	0,00E+00	-4,78E-04	9,34E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,07E-03	8,97E-04	7,12E-05	0,00E+00	-7,70E-04	-1,27E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,21E-07	2,17E-08	1,56E-07	0,00E+00	-1,44E-09	4,46E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,77E+01	2,36E+01	5,37E+00	0,00E+00	-1,90E+01	7,72E+00
Energy (net calorific value) [MJ]	2,12E+01	2,40E+01	8,56E+00	0,00E+00	-1,91E+01	7,74E+00
Energy ren. (net calorific value) [MJ]	4,40E+00	9,92E-01	3,71E+00	0,00E+00	-7,05E-01	4,01E-01
Water consumption [kg]	6,33E+00	4,14E+00	4,32E+00	0,00E+00	-2,59E+00	4,65E-01
Air pollution [m ³]	1,12E+02	2,99E+02	3,05E+01	0,00E+00	-2,60E+02	4,14E+01
Water pollution [m ³]	2,66E-01	1,23E-01	1,23E-01	0,00E+00	-1,01E-01	1,21E-01
Hazardous waste for disposal [kg]	3,37E-07	1,81E-08	3,51E-09	0,00E+00	-1,50E-08	3,30E-07
Disposed of non-hazardous waste [kg]	1,13E-02	2,96E-02	5,98E-03	0,00E+00	-2,54E-02	1,15E-03
Disposed of radioactive waste [kg]	1,34E-03	1,19E-04	1,27E-03	0,00E+00	-6,10E-05	9,50E-06

evaluated from CML 2001, April. 2015

1.3.16 MP-U 83-89 3" M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242349	MP-U 83-89 3" M8/10	10	1,331	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	1,575	2,747	0,502	0,000	-2,273	0,598
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,59E-14	3,02E-15	1,48E-14	0,00E+00	-2,03E-15	9,70E-17
Acidification Potential (AP) [kg SO ₂ -eq.]	6,83E-03	6,40E-03	1,05E-03	0,00E+00	-5,43E-03	4,81E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	1,19E-03	5,92E-04	1,16E-04	0,00E+00	-5,05E-04	9,85E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,13E-03	9,45E-04	7,54E-05	0,00E+00	-8,12E-04	-1,34E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,34E-07	2,20E-08	1,66E-07	0,00E+00	-1,12E-09	4,70E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,86E+01	2,48E+01	5,68E+00	0,00E+00	-2,00E+01	8,14E+00
Energy (net calorific value) [MJ]	2,23E+01	2,52E+01	9,07E+00	0,00E+00	-2,01E+01	8,16E+00
Energy ren. (net calorific value) [MJ]	4,66E+00	1,04E+00	3,93E+00	0,00E+00	-7,36E-01	4,22E-01
Water consumption [kg]	6,65E+00	4,32E+00	4,58E+00	0,00E+00	-2,74E+00	4,91E-01
Air pollution [m ³]	1,18E+02	3,16E+02	3,23E+01	0,00E+00	-2,74E+02	4,37E+01
Water pollution [m ³]	2,81E-01	1,29E-01	1,30E-01	0,00E+00	-1,06E-01	1,28E-01
Hazardous waste for disposal [kg]	3,55E-07	1,91E-08	3,72E-09	0,00E+00	-1,58E-08	3,48E-07
Disposed of non-hazardous waste [kg]	1,19E-02	3,12E-02	6,33E-03	0,00E+00	-2,69E-02	1,21E-03
Disposed of radioactive waste [kg]	1,42E-03	1,25E-04	1,35E-03	0,00E+00	-6,15E-05	1,00E-05

evaluated from CML 2001, April. 2015

1.3.17 MP-U 89-95 M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242350	MP-U 89-95 M8/10	10	1,389	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	1,639	2,865	0,525	0,000	-2,376	0,624
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,66E-14	3,15E-15	1,55E-14	0,00E+00	-2,09E-15	1,01E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	7,12E-03	6,67E-03	1,10E-03	0,00E+00	-5,67E-03	5,02E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	1,24E-03	6,18E-04	1,21E-04	0,00E+00	-5,27E-04	1,03E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,18E-03	9,85E-04	7,90E-05	0,00E+00	-8,48E-04	-1,39E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,44E-07	2,23E-08	1,74E-07	0,00E+00	-8,42E-10	4,90E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,93E+01	2,57E+01	5,95E+00	0,00E+00	-2,08E+01	8,49E+00
Energy (net calorific value) [MJ]	2,32E+01	2,62E+01	9,50E+00	0,00E+00	-2,10E+01	8,52E+00
Energy ren. (net calorific value) [MJ]	4,88E+00	1,09E+00	4,12E+00	0,00E+00	-7,62E-01	4,41E-01
Water consumption [kg]	6,92E+00	4,48E+00	4,79E+00	0,00E+00	-2,86E+00	5,12E-01
Air pollution [m ³]	1,23E+02	3,29E+02	3,39E+01	0,00E+00	-2,86E+02	4,56E+01
Water pollution [m ³]	2,94E-01	1,35E-01	1,36E-01	0,00E+00	-1,11E-01	1,33E-01
Hazardous waste for disposal [kg]	3,71E-07	1,98E-08	3,89E-09	0,00E+00	-1,65E-08	3,63E-07
Disposed of non-hazardous waste [kg]	1,24E-02	3,26E-02	6,63E-03	0,00E+00	-2,81E-02	1,27E-03
Disposed of radioactive waste [kg]	1,49E-03	1,30E-04	1,41E-03	0,00E+00	-6,20E-05	1,05E-05

evaluated from CML 2001, April. 2015

1.3.18 MP-U 95-101 M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242351	MP-U 95-101 M8/10	10	1,447	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	1,703	2,982	0,549	0,000	-2,479	0,650
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,74E-14	3,28E-15	1,62E-14	0,00E+00	-2,16E-15	1,05E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	7,41E-03	6,95E-03	1,15E-03	0,00E+00	-5,91E-03	5,23E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	1,29E-03	6,43E-04	1,27E-04	0,00E+00	-5,49E-04	1,07E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,23E-03	1,03E-03	8,25E-05	0,00E+00	-8,84E-04	-1,45E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,54E-07	2,26E-08	1,81E-07	0,00E+00	-5,69E-10	5,11E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,01E+01	2,67E+01	6,22E+00	0,00E+00	-2,17E+01	8,84E+00
Energy (net calorific value) [MJ]	2,41E+01	2,72E+01	9,92E+00	0,00E+00	-2,19E+01	8,87E+00
Energy ren. (net calorific value) [MJ]	5,10E+00	1,13E+00	4,30E+00	0,00E+00	-7,88E-01	4,59E-01
Water consumption [kg]	7,19E+00	4,63E+00	5,01E+00	0,00E+00	-2,99E+00	5,33E-01
Air pollution [m ³]	1,28E+02	3,43E+02	3,54E+01	0,00E+00	-2,98E+02	4,75E+01
Water pollution [m ³]	3,06E-01	1,40E-01	1,43E-01	0,00E+00	-1,15E-01	1,39E-01
Hazardous waste for disposal [kg]	3,86E-07	2,06E-08	4,07E-09	0,00E+00	-1,72E-08	3,78E-07
Disposed of non-hazardous waste [kg]	1,29E-02	3,39E-02	6,93E-03	0,00E+00	-2,93E-02	1,32E-03
Disposed of radioactive waste [kg]	1,56E-03	1,36E-04	1,47E-03	0,00E+00	-6,25E-05	1,09E-05

evaluated from CML 2001, April. 2015

1.3.19 MP-U 102-108 M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242352	MP-U 102-108 M8/10	10	1,925	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	2,233	3,955	0,745	0,000	-3,332	0,865
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,37E-14	4,33E-15	2,20E-14	0,00E+00	-2,71E-15	1,40E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	9,82E-03	9,20E-03	1,56E-03	0,00E+00	-7,89E-03	6,95E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	1,72E-03	8,52E-04	1,72E-04	0,00E+00	-7,33E-04	1,42E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,64E-03	1,36E-03	1,12E-04	0,00E+00	-1,18E-03	-1,93E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,41E-07	2,50E-08	2,46E-07	0,00E+00	1,67E-09	6,79E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,63E+01	3,49E+01	8,44E+00	0,00E+00	-2,88E+01	1,18E+01
Energy (net calorific value) [MJ]	3,17E+01	3,54E+01	1,35E+01	0,00E+00	-2,90E+01	1,18E+01
Energy ren. (net calorific value) [MJ]	6,93E+00	1,49E+00	5,84E+00	0,00E+00	-1,00E+00	6,11E-01
Water consumption [kg]	9,41E+00	5,91E+00	6,80E+00	0,00E+00	-4,01E+00	7,09E-01
Air pollution [m ³]	1,69E+02	4,56E+02	4,80E+01	0,00E+00	-3,98E+02	6,32E+01
Water pollution [m ³]	4,11E-01	1,85E-01	1,93E-01	0,00E+00	-1,52E-01	1,85E-01
Hazardous waste for disposal [kg]	5,13E-07	2,71E-08	5,52E-09	0,00E+00	-2,29E-08	5,03E-07
Disposed of non-hazardous waste [kg]	1,72E-02	4,52E-02	9,40E-03	0,00E+00	-3,92E-02	1,76E-03
Disposed of radioactive waste [kg]	2,13E-03	1,80E-04	2,00E-03	0,00E+00	-6,65E-05	1,45E-05

evaluated from CML 2001, April. 2015

1.3.20 MP-U 109-115 4" M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242353	MP-U 109-115 4" M8/10	10	2,017	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	2,377	4,145	0,782	0,000	-3,457	0,907
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,47E-14	4,50E-15	2,31E-14	0,00E+00	-3,01E-15	1,47E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,04E-02	9,68E-03	1,63E-03	0,00E+00	-8,24E-03	7,29E-03
Eutrophication Potential (EP) [kg (PO ₄) ³⁻ -eq.]	1,80E-03	8,94E-04	1,81E-04	0,00E+00	-7,66E-04	1,49E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,71E-03	1,43E-03	1,18E-04	0,00E+00	-1,23E-03	-2,02E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,57E-07	2,82E-08	2,58E-07	0,00E+00	-7,50E-10	7,12E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,80E+01	3,70E+01	8,86E+00	0,00E+00	-3,03E+01	1,23E+01
Energy (net calorific value) [MJ]	3,37E+01	3,77E+01	1,41E+01	0,00E+00	-3,05E+01	1,24E+01
Energy ren. (net calorific value) [MJ]	7,23E+00	1,56E+00	6,13E+00	0,00E+00	-1,10E+00	6,40E-01
Water consumption [kg]	1,02E+01	6,53E+00	7,14E+00	0,00E+00	-4,17E+00	7,43E-01
Air pollution [m ³]	1,79E+02	4,79E+02	5,04E+01	0,00E+00	-4,16E+02	6,62E+01
Water pollution [m ³]	4,29E-01	1,93E-01	2,03E-01	0,00E+00	-1,60E-01	1,94E-01
Hazardous waste for disposal [kg]	5,38E-07	2,82E-08	5,79E-09	0,00E+00	-2,39E-08	5,28E-07
Disposed of non-hazardous waste [kg]	1,80E-02	4,72E-02	9,87E-03	0,00E+00	-4,08E-02	1,84E-03
Disposed of radioactive waste [kg]						

evaluated from CML 2001, April. 2015

1.3.21 MP-U 115-121 M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242354	MP-U 115-121 M8/10	10	2,087	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	2,453	4,286	0,810	0,000	-3,580	0,938
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,56E-14	4,66E-15	2,39E-14	0,00E+00	-3,08E-15	1,52E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,07E-02	1,00E-02	1,69E-03	0,00E+00	-8,53E-03	7,54E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	1,86E-03	9,24E-04	1,87E-04	0,00E+00	-7,92E-04	1,54E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,77E-03	1,48E-03	1,22E-04	0,00E+00	-1,28E-03	-2,09E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,69E-07	2,85E-08	2,68E-07	0,00E+00	-4,22E-10	7,37E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,89E+01	3,82E+01	9,18E+00	0,00E+00	-3,13E+01	1,28E+01
Energy (net calorific value) [MJ]	3,48E+01	3,89E+01	1,46E+01	0,00E+00	-3,15E+01	1,28E+01
Energy ren. (net calorific value) [MJ]	7,50E+00	1,62E+00	6,35E+00	0,00E+00	-1,13E+00	6,62E-01
Water consumption [kg]	1,06E+01	6,72E+00	7,40E+00	0,00E+00	-4,31E+00	7,69E-01
Air pollution [m ³]	1,85E+02	4,95E+02	5,22E+01	0,00E+00	-4,30E+02	6,85E+01
Water pollution [m ³]	4,44E-01	2,00E-01	2,10E-01	0,00E+00	-1,66E-01	2,00E-01
Hazardous waste for disposal [kg]	5,56E-07	2,92E-08	6,00E-09	0,00E+00	-2,48E-08	5,46E-07
Disposed of non-hazardous waste [kg]	1,87E-02	4,88E-02	1,02E-02	0,00E+00	-4,23E-02	1,90E-03
Disposed of radioactive waste [kg]	2,30E-03	1,94E-04	2,17E-03	0,00E+00	-8,71E-05	1,57E-05

evaluated from CML 2001, April. 2015

1.3.22 MP-U 121-127 M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242355	MP-U 121-127 M8/10	10	2,156	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	2,530	4,427	0,839	0,000	-3,704	0,969
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,65E-14	4,81E-15	2,47E-14	0,00E+00	-3,16E-15	1,57E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,11E-02	1,03E-02	1,75E-03	0,00E+00	-8,81E-03	7,79E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	1,92E-03	9,55E-04	1,94E-04	0,00E+00	-8,19E-04	1,59E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,83E-03	1,53E-03	1,26E-04	0,00E+00	-1,32E-03	-2,16E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,82E-07	2,88E-08	2,77E-07	0,00E+00	-9,35E-11	7,61E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,98E+01	3,94E+01	9,50E+00	0,00E+00	-3,23E+01	1,32E+01
Energy (net calorific value) [MJ]	3,60E+01	4,01E+01	1,52E+01	0,00E+00	-3,25E+01	1,32E+01
Energy ren. (net calorific value) [MJ]	7,76E+00	1,67E+00	6,57E+00	0,00E+00	-1,16E+00	6,84E-01
Water consumption [kg]	1,09E+01	6,91E+00	7,65E+00	0,00E+00	-4,46E+00	7,94E-01
Air pollution [m ³]	1,91E+02	5,11E+02	5,41E+01	0,00E+00	-4,45E+02	7,07E+01
Water pollution [m ³]	4,60E-01	2,06E-01	2,18E-01	0,00E+00	-1,71E-01	2,07E-01
Hazardous waste for disposal [kg]	5,75E-07	3,01E-08	6,21E-09	0,00E+00	-2,56E-08	5,64E-07
Disposed of non-hazardous waste [kg]	1,93E-02	5,04E-02	1,06E-02	0,00E+00	-4,37E-02	1,97E-03
Disposed of radioactive waste [kg]	2,38E-03	2,00E-04	2,25E-03	0,00E+00	-8,77E-05	1,62E-05

evaluated from CML 2001, April. 2015

1.3.23 MP-U 128-134 M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242356	MP-U 128-134 M8/10	10	2,237	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	2,620	4,592	0,872	0,000	-3,849	1,005
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,76E-14	4,99E-15	2,57E-14	0,00E+00	-3,26E-15	1,63E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,15E-02	1,07E-02	1,82E-03	0,00E+00	-9,15E-03	8,08E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	2,00E-03	9,90E-04	2,01E-04	0,00E+00	-8,50E-04	1,65E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,90E-03	1,59E-03	1,31E-04	0,00E+00	-1,37E-03	-2,24E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,97E-07	2,92E-08	2,88E-07	0,00E+00	2,90E-10	7,90E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,08E+01	4,08E+01	9,88E+00	0,00E+00	-3,35E+01	1,37E+01
Energy (net calorific value) [MJ]	3,72E+01	4,15E+01	1,58E+01	0,00E+00	-3,37E+01	1,37E+01
Energy ren. (net calorific value) [MJ]	8,07E+00	1,73E+00	6,83E+00	0,00E+00	-1,20E+00	7,10E-01
Water consumption [kg]	1,13E+01	7,12E+00	7,96E+00	0,00E+00	-4,64E+00	8,24E-01
Air pollution [m ³]	1,98E+02	5,31E+02	5,62E+01	0,00E+00	-4,62E+02	7,34E+01
Water pollution [m ³]	4,78E-01	2,14E-01	2,26E-01	0,00E+00	-1,77E-01	2,15E-01
Hazardous waste for disposal [kg]	5,96E-07	3,12E-08	6,46E-09	0,00E+00	-2,66E-08	5,85E-07
Disposed of non-hazardous waste [kg]	2,00E-02	5,24E-02	1,10E-02	0,00E+00	-4,54E-02	2,04E-03
Disposed of radioactive waste [kg]	2,48E-03	2,08E-04	2,34E-03	0,00E+00	-8,83E-05	1,68E-05

evaluated from CML 2001, April. 2015

1.3.24 MP-U 135-141 5" M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242357	MP-U 135-141 5" M8/10	10	2,318	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	2,710	4,756	0,905	0,000	-3,993	1,042
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,87E-14	5,16E-15	2,67E-14	0,00E+00	-3,35E-15	1,69E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,19E-02	1,11E-02	1,89E-03	0,00E+00	-9,48E-03	8,37E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	2,07E-03	1,03E-03	2,09E-04	0,00E+00	-8,81E-04	1,71E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,97E-03	1,64E-03	1,36E-04	0,00E+00	-1,42E-03	-2,33E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	4,11E-07	2,96E-08	2,99E-07	0,00E+00	6,73E-10	8,18E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,19E+01	4,22E+01	1,03E+01	0,00E+00	-3,47E+01	1,42E+01
Energy (net calorific value) [MJ]	3,85E+01	4,29E+01	1,64E+01	0,00E+00	-3,49E+01	1,42E+01
Energy ren. (net calorific value) [MJ]	8,38E+00	1,79E+00	7,09E+00	0,00E+00	-1,23E+00	7,35E-01
Water consumption [kg]	1,16E+01	7,34E+00	8,26E+00	0,00E+00	-4,81E+00	8,54E-01
Air pollution [m ³]	2,05E+02	5,50E+02	5,83E+01	0,00E+00	-4,79E+02	7,61E+01
Water pollution [m ³]	4,95E-01	2,22E-01	2,35E-01	0,00E+00	-1,84E-01	2,22E-01
Hazardous waste for disposal [kg]	6,18E-07	3,23E-08	6,70E-09	0,00E+00	-2,75E-08	6,06E-07
Disposed of non-hazardous waste [kg]	2,07E-02	5,43E-02	1,14E-02	0,00E+00	-4,71E-02	2,11E-03
Disposed of radioactive waste [kg]	2,57E-03	2,15E-04	2,43E-03	0,00E+00	-8,90E-05	1,74E-05

evaluated from CML 2001, April. 2015

1.3.25 MP-U 141-147 M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2305351	MP-U 141-147 M8/10	10	2,399	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	2,800	4,922	0,938	0,000	-4,138	1,078
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,97E-14	5,34E-15	2,77E-14	0,00E+00	-3,44E-15	1,75E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,23E-02	1,15E-02	1,96E-03	0,00E+00	-9,82E-03	8,66E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	2,14E-03	1,06E-03	2,17E-04	0,00E+00	-9,12E-04	1,77E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,04E-03	1,70E-03	1,41E-04	0,00E+00	-1,47E-03	-2,41E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	4,26E-07	3,00E-08	3,10E-07	0,00E+00	1,06E-09	8,47E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,29E+01	4,35E+01	1,06E+01	0,00E+00	-3,59E+01	1,47E+01
Energy (net calorific value) [MJ]	3,98E+01	4,43E+01	1,70E+01	0,00E+00	-3,61E+01	1,47E+01
Energy ren. (net calorific value) [MJ]	8,69E+00	1,85E+00	7,35E+00	0,00E+00	-1,27E+00	7,61E-01
Water consumption [kg]	1,20E+01	7,56E+00	8,56E+00	0,00E+00	-4,98E+00	8,84E-01
Air pollution [m ³]	2,12E+02	5,69E+02	6,05E+01	0,00E+00	-4,96E+02	7,87E+01
Water pollution [m ³]	5,13E-01	2,29E-01	2,44E-01	0,00E+00	-1,90E-01	2,30E-01
Hazardous waste for disposal [kg]	6,39E-07	3,34E-08	6,95E-09	0,00E+00	-2,85E-08	6,27E-07
Disposed of non-hazardous waste [kg]	2,15E-02	5,62E-02	1,18E-02	0,00E+00	-4,87E-02	2,19E-03
Disposed of radioactive waste [kg]	2,67E-03	2,23E-04	2,52E-03	0,00E+00	-8,96E-05	1,81E-05

evaluated from CML 2001, April. 2015

1.3.26 MP-U 147-153 M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2305352	MP-U 147-153 M8/10	10	2,714	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	3,218	5,565	1,066	0,000	-4,634	1,220
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,35E-14	5,99E-15	3,14E-14	0,00E+00	-4,12E-15	1,98E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,40E-02	1,30E-02	2,23E-03	0,00E+00	-1,11E-02	9,80E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	2,43E-03	1,20E-03	2,46E-04	0,00E+00	-1,03E-03	2,01E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,29E-03	1,93E-03	1,60E-04	0,00E+00	-1,66E-03	-2,72E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	4,82E-07	3,62E-08	3,52E-07	0,00E+00	-2,21E-09	9,58E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,79E+01	4,99E+01	1,21E+01	0,00E+00	-4,07E+01	1,66E+01
Energy (net calorific value) [MJ]	4,57E+01	5,08E+01	1,93E+01	0,00E+00	-4,10E+01	1,66E+01
Energy ren. (net calorific value) [MJ]	9,81E+00	2,10E+00	8,35E+00	0,00E+00	-1,50E+00	8,61E-01
Water consumption [kg]	1,42E+01	9,02E+00	9,73E+00	0,00E+00	-5,59E+00	1,00E+00
Air pollution [m ³]	2,43E+02	6,44E+02	6,87E+01	0,00E+00	-5,59E+02	8,91E+01
Water pollution [m ³]	5,78E-01	2,57E-01	2,77E-01	0,00E+00	-2,16E-01	2,60E-01
Hazardous waste for disposal [kg]	7,23E-07	3,74E-08	7,89E-09	0,00E+00	-3,22E-08	7,10E-07
Disposed of non-hazardous waste [kg]	2,43E-02	6,32E-02	1,35E-02	0,00E+00	-5,48E-02	2,48E-03
Disposed of radioactive waste [kg]	3,01E-03	2,50E-04	2,86E-03	0,00E+00	-1,24E-04	2,04E-05

evaluated from CML 2001, April. 2015

1.3.27 MP-U 153-159 M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2305353	MP-U 153-159 M8/10	10	2,790	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	3,302	5,720	1,097	0,000	-4,770	1,254
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,45E-14	6,16E-15	3,23E-14	0,00E+00	-4,21E-15	2,03E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,44E-02	1,34E-02	2,29E-03	0,00E+00	-1,14E-02	1,01E-02
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	2,49E-03	1,23E-03	2,53E-04	0,00E+00	-1,06E-03	2,06E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,36E-03	1,98E-03	1,65E-04	0,00E+00	-1,70E-03	-2,80E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	4,96E-07	3,65E-08	3,62E-07	0,00E+00	-1,85E-09	9,85E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,88E+01	5,12E+01	1,24E+01	0,00E+00	-4,19E+01	1,71E+01
Energy (net calorific value) [MJ]	4,69E+01	5,22E+01	1,98E+01	0,00E+00	-4,22E+01	1,71E+01
Energy ren. (net calorific value) [MJ]	1,01E+01	2,15E+00	8,59E+00	0,00E+00	-1,53E+00	8,85E-01
Water consumption [kg]	1,45E+01	9,23E+00	1,00E+01	0,00E+00	-5,75E+00	1,03E+00
Air pollution [m ³]	2,50E+02	6,62E+02	7,07E+01	0,00E+00	-5,75E+02	9,16E+01
Water pollution [m ³]	5,95E-01	2,65E-01	2,85E-01	0,00E+00	-2,22E-01	2,68E-01
Hazardous waste for disposal [kg]	7,43E-07	3,84E-08	8,13E-09	0,00E+00	-3,31E-08	7,30E-07
Disposed of non-hazardous waste [kg]	2,50E-02	6,50E-02	1,38E-02	0,00E+00	-5,64E-02	2,55E-03
Disposed of radioactive waste [kg]	3,10E-03	2,57E-04	2,94E-03	0,00E+00	-1,25E-04	2,10E-05

evaluated from CML 2001, April. 2015

1.3.28 MP-U 160-166 6" M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2305354	MP-U 160-166 6" M8/10	10	2,880	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	3,401	5,902	1,134	0,000	-4,929	1,294
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,57E-14	6,35E-15	3,34E-14	0,00E+00	-4,31E-15	2,10E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,48E-02	1,38E-02	2,37E-03	0,00E+00	-1,18E-02	1,04E-02
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	2,57E-03	1,27E-03	2,62E-04	0,00E+00	-1,09E-03	2,13E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,43E-03	2,05E-03	1,70E-04	0,00E+00	-1,76E-03	-2,89E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	5,12E-07	3,70E-08	3,75E-07	0,00E+00	-1,42E-09	1,02E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	4,00E+01	5,27E+01	1,28E+01	0,00E+00	-4,32E+01	1,76E+01
Energy (net calorific value) [MJ]	4,83E+01	5,37E+01	2,05E+01	0,00E+00	-4,35E+01	1,77E+01
Energy ren. (net calorific value) [MJ]	1,04E+01	2,22E+00	8,88E+00	0,00E+00	-1,57E+00	9,13E-01
Water consumption [kg]	1,49E+01	9,47E+00	1,03E+01	0,00E+00	-5,94E+00	1,06E+00
Air pollution [m ³]	2,58E+02	6,84E+02	7,31E+01	0,00E+00	-5,93E+02	9,45E+01
Water pollution [m ³]	6,14E-01	2,73E-01	2,94E-01	0,00E+00	-2,29E-01	2,76E-01
Hazardous waste for disposal [kg]	7,67E-07	3,97E-08	8,40E-09	0,00E+00	-3,42E-08	7,53E-07
Disposed of non-hazardous waste [kg]	2,58E-02	6,71E-02	1,43E-02	0,00E+00	-5,83E-02	2,63E-03
Disposed of radioactive waste [kg]	3,20E-03	2,65E-04	3,04E-03	0,00E+00	-1,26E-04	2,17E-05

evaluated from CML 2001, April. 2015

1.3.29 MP-U 166-172 M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2305355	MP-U 166-172 M8/10	10	2,956	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	3,485	6,057	1,165	0,000	-5,065	1,328
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,67E-14	6,52E-15	3,44E-14	0,00E+00	-4,40E-15	2,15E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,52E-02	1,42E-02	2,43E-03	0,00E+00	-1,21E-02	1,07E-02
Eutrophication Potential (EP) [kg (PO ₄) ³⁻ -eq.]	2,64E-03	1,31E-03	2,69E-04	0,00E+00	-1,12E-03	2,19E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,50E-03	2,10E-03	1,75E-04	0,00E+00	-1,81E-03	-2,97E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	5,26E-07	3,74E-08	3,85E-07	0,00E+00	-1,06E-09	1,04E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	4,10E+01	5,40E+01	1,32E+01	0,00E+00	-4,43E+01	1,81E+01
Energy (net calorific value) [MJ]	4,96E+01	5,50E+01	2,11E+01	0,00E+00	-4,46E+01	1,81E+01
Energy ren. (net calorific value) [MJ]	1,07E+01	2,28E+00	9,13E+00	0,00E+00	-1,61E+00	9,38E-01
Water consumption [kg]	1,53E+01	9,67E+00	1,06E+01	0,00E+00	-6,11E+00	1,09E+00
Air pollution [m ³]	2,64E+02	7,02E+02	7,51E+01	0,00E+00	-6,09E+02	9,70E+01
Water pollution [m ³]	6,31E-01	2,80E-01	3,02E-01	0,00E+00	-2,35E-01	2,84E-01
Hazardous waste for disposal [kg]	7,87E-07	4,07E-08	8,63E-09	0,00E+00	-3,51E-08	7,73E-07
Disposed of non-hazardous waste [kg]	2,64E-02	6,89E-02	1,47E-02	0,00E+00	-5,99E-02	2,70E-03
Disposed of radioactive waste [kg]	3,29E-03	2,72E-04	3,12E-03	0,00E+00	-1,26E-04	2,22E-05

evaluated from CML 2001, April. 2015

1.3.30 MP-U 170-176 M8/10

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2305356	MP-U 170-176 M8/10	10	3,007	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	3,543	6,162	1,186	0,000	-5,157	1,352
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,74E-14	6,63E-15	3,50E-14	0,00E+00	-4,46E-15	2,19E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,55E-02	1,44E-02	2,48E-03	0,00E+00	-1,23E-02	1,09E-02
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	2,69E-03	1,33E-03	2,74E-04	0,00E+00	-1,14E-03	2,22E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,54E-03	2,13E-03	1,78E-04	0,00E+00	-1,84E-03	-3,02E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	5,35E-07	3,76E-08	3,92E-07	0,00E+00	-8,17E-10	1,06E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	4,16E+01	5,49E+01	1,34E+01	0,00E+00	-4,51E+01	1,84E+01
Energy (net calorific value) [MJ]	5,04E+01	5,59E+01	2,14E+01	0,00E+00	-4,54E+01	1,84E+01
Energy ren. (net calorific value) [MJ]	1,09E+01	2,32E+00	9,29E+00	0,00E+00	-1,63E+00	9,54E-01
Water consumption [kg]	1,55E+01	9,81E+00	1,08E+01	0,00E+00	-6,22E+00	1,11E+00
Air pollution [m ³]	2,69E+02	7,14E+02	7,65E+01	0,00E+00	-6,20E+02	9,87E+01
Water pollution [m ³]	6,43E-01	2,85E-01	3,08E-01	0,00E+00	-2,39E-01	2,89E-01
Hazardous waste for disposal [kg]	8,01E-07	4,14E-08	8,78E-09	0,00E+00	-3,57E-08	7,87E-07
Disposed of non-hazardous waste [kg]	2,69E-02	7,01E-02	1,50E-02	0,00E+00	-6,09E-02	2,74E-03
Disposed of radioactive waste [kg]	3,35E-03	2,77E-04	3,18E-03	0,00E+00	-1,27E-04	2,26E-05

evaluated from CML 2001, April. 2015

1.3.31 MP-U 13-17 1/4" M8/10 1/2"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242359	MP-U 13-17 1/4" M8/10 1/2"	25	1,826	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	1,912	4,191	0,091	0,000	-3,191	0,821
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	6,05E-15	5,64E-15	2,70E-15	0,00E+00	-2,43E-15	1,33E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	8,52E-03	9,24E-03	1,91E-04	0,00E+00	-7,51E-03	6,60E-03
Eutrophication Potential (EP) [kg (PO ₄) ³⁻ eq.]	1,57E-03	8,97E-04	2,11E-05	0,00E+00	-6,97E-04	1,35E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,67E-03	1,27E-03	1,38E-05	0,00E+00	-1,12E-03	-1,83E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,48E-07	4,98E-08	3,02E-08	0,00E+00	3,63E-09	6,45E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,34E+01	3,84E+01	1,04E+00	0,00E+00	-2,73E+01	1,12E+01
Energy (net calorific value) [MJ]	2,45E+01	3,91E+01	1,65E+00	0,00E+00	-2,74E+01	1,12E+01
Energy ren. (net calorific value) [MJ]	2,10E+00	1,72E+00	7,17E-01	0,00E+00	-9,17E-01	5,79E-01
Water consumption [kg]	8,44E-01	3,17E+00	8,34E-01	0,00E+00	-3,83E+00	6,73E-01
Air pollution [m ³]	1,13E+02	4,26E+02	5,87E+00	0,00E+00	-3,79E+02	5,99E+01
Water pollution [m ³]	2,65E-01	2,10E-01	2,38E-02	0,00E+00	-1,43E-01	1,75E-01
Hazardous waste for disposal [kg]	4,86E-07	2,94E-08	6,78E-10	0,00E+00	-2,17E-08	4,78E-07
Disposed of non-hazardous waste [kg]	1,24E-02	4,69E-02	1,15E-03	0,00E+00	-3,73E-02	1,67E-03
Disposed of radioactive waste [kg]	4,24E-04	2,15E-04	2,45E-04	0,00E+00	-4,94E-05	1,37E-05

evaluated from CML 2001, April. 2015

1.3.32 MP-U 16-20 3/8" M8/10 1/2"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242360	MP-U 16-20 3/8" M8/10 1/2"	25	1,866	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	1,952	4,284	0,092	0,000	-3,263	0,839
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	6,16E-15	5,77E-15	2,72E-15	0,00E+00	-2,47E-15	1,36E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	8,70E-03	9,44E-03	1,93E-04	0,00E+00	-7,67E-03	6,74E-03
Eutrophication Potential (EP) [kg (PO ₄) ³⁻ -eq.]	1,61E-03	9,17E-04	2,13E-05	0,00E+00	-7,13E-04	1,38E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,71E-03	1,30E-03	1,39E-05	0,00E+00	-1,15E-03	-1,87E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,51E-07	5,07E-08	3,05E-08	0,00E+00	3,82E-09	6,59E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,39E+01	3,93E+01	1,05E+00	0,00E+00	-2,79E+01	1,14E+01
Energy (net calorific value) [MJ]	2,50E+01	3,99E+01	1,67E+00	0,00E+00	-2,80E+01	1,14E+01
Energy ren. (net calorific value) [MJ]	2,14E+00	1,76E+00	7,24E-01	0,00E+00	-9,35E-01	5,92E-01
Water consumption [kg]	8,35E-01	3,22E+00	8,42E-01	0,00E+00	-3,92E+00	6,88E-01
Air pollution [m ³]	1,15E+02	4,35E+02	5,93E+00	0,00E+00	-3,88E+02	6,12E+01
Water pollution [m ³]	2,71E-01	2,14E-01	2,40E-02	0,00E+00	-1,46E-01	1,79E-01
Hazardous waste for disposal [kg]	4,97E-07	3,00E-08	6,84E-10	0,00E+00	-2,22E-08	4,88E-07
Disposed of non-hazardous waste [kg]	1,26E-02	4,79E-02	1,17E-03	0,00E+00	-3,82E-02	1,70E-03
Disposed of radioactive waste [kg]	4,32E-04	2,19E-04	2,48E-04	0,00E+00	-4,98E-05	1,40E-05

evaluated from CML 2001, April. 2015

1.3.33 MP-U 20-24 1/2" M8/10 1/2"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242361	MP-U 20-24 1/2" M8/10 1/2"	25	1,920	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	2,005	4,407	0,094	0,000	-3,358	0,863
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	6,30E-15	5,94E-15	2,76E-15	0,00E+00	-2,54E-15	1,40E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	8,95E-03	9,71E-03	1,95E-04	0,00E+00	-7,90E-03	6,93E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	1,65E-03	9,44E-04	2,16E-05	0,00E+00	-7,33E-04	1,42E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,76E-03	1,34E-03	1,41E-05	0,00E+00	-1,18E-03	-1,93E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,55E-07	5,18E-08	3,09E-08	0,00E+00	4,07E-09	6,78E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,45E+01	4,04E+01	1,06E+00	0,00E+00	-2,87E+01	1,17E+01
Energy (net calorific value) [MJ]	2,57E+01	4,10E+01	1,69E+00	0,00E+00	-2,88E+01	1,18E+01
Energy ren. (net calorific value) [MJ]	2,19E+00	1,81E+00	7,33E-01	0,00E+00	-9,59E-01	6,09E-01
Water consumption [kg]	8,22E-01	3,29E+00	8,53E-01	0,00E+00	-4,03E+00	7,07E-01
Air pollution [m ³]	1,18E+02	4,48E+02	6,01E+00	0,00E+00	-3,99E+02	6,30E+01
Water pollution [m ³]	2,79E-01	2,20E-01	2,43E-02	0,00E+00	-1,50E-01	1,84E-01
Hazardous waste for disposal [kg]	5,11E-07	3,09E-08	6,93E-10	0,00E+00	-2,28E-08	5,02E-07
Disposed of non-hazardous waste [kg]	1,30E-02	4,93E-02	1,18E-03	0,00E+00	-3,93E-02	1,75E-03
Disposed of radioactive waste [kg]	4,41E-04	2,26E-04	2,51E-04	0,00E+00	-5,02E-05	1,44E-05

evaluated from CML 2001, April. 2015

1.3.34 MP-U 25-29 3/4" M8/10 1/2"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242362	MP-U 25-29 3/4" M8/10 1/2"	25	2,000	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	2,125	4,590	0,099	0,000	-3,464	0,899
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	6,40E-15	6,15E-15	2,91E-15	0,00E+00	-2,81E-15	1,46E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	9,38E-03	1,02E-02	2,06E-04	0,00E+00	-8,20E-03	7,22E-03
Eutrophication Potential (EP) [kg (PO ₄) ³⁻ -eq.]	1,72E-03	9,84E-04	2,28E-05	0,00E+00	-7,62E-04	1,48E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,82E-03	1,40E-03	1,48E-05	0,00E+00	-1,23E-03	-2,01E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,61E-07	5,59E-08	3,26E-08	0,00E+00	1,79E-09	7,06E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,60E+01	4,26E+01	1,12E+00	0,00E+00	-2,99E+01	1,22E+01
Energy (net calorific value) [MJ]	2,72E+01	4,33E+01	1,79E+00	0,00E+00	-3,01E+01	1,23E+01
Energy ren. (net calorific value) [MJ]	2,25E+00	1,89E+00	7,72E-01	0,00E+00	-1,04E+00	6,34E-01
Water consumption [kg]	1,23E+00	3,76E+00	8,98E-01	0,00E+00	-4,17E+00	7,37E-01
Air pollution [m ³]	1,25E+02	4,67E+02	6,33E+00	0,00E+00	-4,14E+02	6,56E+01
Water pollution [m ³]	2,88E-01	2,29E-01	2,56E-02	0,00E+00	-1,58E-01	1,92E-01
Hazardous waste for disposal [kg]	5,32E-07	3,19E-08	7,32E-10	0,00E+00	-2,38E-08	5,23E-07
Disposed of non-hazardous waste [kg]	1,35E-02	5,11E-02	1,24E-03	0,00E+00	-4,07E-02	1,82E-03
Disposed of radioactive waste [kg]	4,45E-04	2,34E-04	2,64E-04	0,00E+00	-6,88E-05	1,51E-05

evaluated from CML 2001, April. 2015

1.3.35 MP-U 30-34 1" M8/10¹/₂"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242363	MP-U 30-34 1" M8/10 ¹ / ₂ "	25	2,068	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	2,192	4,747	0,100	0,000	-3,585	0,929
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	6,58E-15	6,37E-15	2,95E-15	0,00E+00	-2,89E-15	1,51E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	9,69E-03	1,05E-02	2,09E-04	0,00E+00	-8,48E-03	7,47E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	1,78E-03	1,02E-03	2,31E-05	0,00E+00	-7,88E-04	1,53E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,88E-03	1,44E-03	1,51E-05	0,00E+00	-1,27E-03	-2,07E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,66E-07	5,74E-08	3,31E-08	0,00E+00	2,11E-09	7,30E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,68E+01	4,40E+01	1,14E+00	0,00E+00	-3,09E+01	1,26E+01
Energy (net calorific value) [MJ]	2,81E+01	4,47E+01	1,81E+00	0,00E+00	-3,11E+01	1,27E+01
Energy ren. (net calorific value) [MJ]	2,32E+00	1,95E+00	7,84E-01	0,00E+00	-1,07E+00	6,56E-01
Water consumption [kg]	1,22E+00	3,85E+00	9,12E-01	0,00E+00	-4,31E+00	7,62E-01
Air pollution [m ³]	1,29E+02	4,83E+02	6,43E+00	0,00E+00	-4,28E+02	6,79E+01
Water pollution [m ³]	2,98E-01	2,36E-01	2,60E-02	0,00E+00	-1,63E-01	1,98E-01
Hazardous waste for disposal [kg]	5,50E-07	3,30E-08	7,43E-10	0,00E+00	-2,46E-08	5,41E-07
Disposed of non-hazardous waste [kg]	1,39E-02	5,29E-02	1,26E-03	0,00E+00	-4,21E-02	1,89E-03
Disposed of radioactive waste [kg]	4,57E-04	2,42E-04	2,68E-04	0,00E+00	-6,94E-05	1,56E-05

evaluated from CML 2001, April. 2015

1.3.36 MP-U 34-38 M8/10/½"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242364	MP-U 34-38 M8/10/½"	25	2,122	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	2,246	4,873	0,102	0,000	-3,682	0,954
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	6,73E-15	6,54E-15	2,99E-15	0,00E+00	-2,95E-15	1,55E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	9,94E-03	1,08E-02	2,12E-04	0,00E+00	-8,71E-03	7,67E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	1,83E-03	1,04E-03	2,34E-05	0,00E+00	-8,09E-04	1,57E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,93E-03	1,48E-03	1,52E-05	0,00E+00	-1,30E-03	-2,13E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,69E-07	5,86E-08	3,35E-08	0,00E+00	2,37E-09	7,49E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,75E+01	4,51E+01	1,15E+00	0,00E+00	-3,17E+01	1,30E+01
Energy (net calorific value) [MJ]	2,88E+01	4,59E+01	1,84E+00	0,00E+00	-3,19E+01	1,30E+01
Energy ren. (net calorific value) [MJ]	2,37E+00	2,00E+00	7,94E-01	0,00E+00	-1,10E+00	6,73E-01
Water consumption [kg]	1,20E+00	3,93E+00	9,23E-01	0,00E+00	-4,43E+00	7,82E-01
Air pollution [m ³]	1,32E+02	4,95E+02	6,51E+00	0,00E+00	-4,40E+02	6,96E+01
Water pollution [m ³]	3,05E-01	2,43E-01	2,63E-02	0,00E+00	-1,67E-01	2,04E-01
Hazardous waste for disposal [kg]	5,64E-07	3,38E-08	7,52E-10	0,00E+00	-2,52E-08	5,55E-07
Disposed of non-hazardous waste [kg]	1,43E-02	5,43E-02	1,28E-03	0,00E+00	-4,32E-02	1,94E-03
Disposed of radioactive waste [kg]	4,66E-04	2,49E-04	2,72E-04	0,00E+00	-6,98E-05	1,60E-05

evaluated from CML 2001, April. 2015

1.3.37 MP-U 38-42 M8/10/½"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242365	MP-U 38-42 M8/10/½"	25	2,177	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	2,301	4,999	0,103	0,000	-3,779	0,978
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	6,88E-15	6,71E-15	3,02E-15	0,00E+00	-3,01E-15	1,59E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,02E-02	1,10E-02	2,14E-04	0,00E+00	-8,93E-03	7,86E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	1,88E-03	1,07E-03	2,37E-05	0,00E+00	-8,29E-04	1,61E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,99E-03	1,52E-03	1,54E-05	0,00E+00	-1,34E-03	-2,18E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,73E-07	5,97E-08	3,39E-08	0,00E+00	2,63E-09	7,68E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,81E+01	4,62E+01	1,16E+00	0,00E+00	-3,26E+01	1,33E+01
Energy (net calorific value) [MJ]	2,95E+01	4,70E+01	1,86E+00	0,00E+00	-3,27E+01	1,33E+01
Energy ren. (net calorific value) [MJ]	2,42E+00	2,05E+00	8,03E-01	0,00E+00	-1,12E+00	6,90E-01
Water consumption [kg]	1,19E+00	4,00E+00	9,34E-01	0,00E+00	-4,54E+00	8,02E-01
Air pollution [m ³]	1,35E+02	5,08E+02	6,58E+00	0,00E+00	-4,51E+02	7,14E+01
Water pollution [m ³]	3,13E-01	2,49E-01	2,66E-02	0,00E+00	-1,72E-01	2,09E-01
Hazardous waste for disposal [kg]	5,79E-07	3,47E-08	7,61E-10	0,00E+00	-2,59E-08	5,69E-07
Disposed of non-hazardous waste [kg]	1,46E-02	5,57E-02	1,29E-03	0,00E+00	-4,44E-02	1,99E-03
Disposed of radioactive waste [kg]	4,76E-04	2,55E-04	2,75E-04	0,00E+00	-7,03E-05	1,64E-05

evaluated from CML 2001, April. 2015

1.3.38 MP-U 42-47 1 ¼" M8/10/½"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242366	MP-U 42-47 1 ¼" M8/10/½"	25	2,267	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	2,393	5,204	0,111	0,000	-3,941	1,019
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	7,29E-15	6,98E-15	3,26E-15	0,00E+00	-3,11E-15	1,65E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,06E-02	1,15E-02	2,31E-04	0,00E+00	-9,31E-03	8,19E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ -eq.]	1,95E-03	1,11E-03	2,56E-05	0,00E+00	-8,64E-04	1,68E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,07E-03	1,58E-03	1,67E-05	0,00E+00	-1,39E-03	-2,27E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,81E-07	6,14E-08	3,66E-08	0,00E+00	3,06E-09	8,00E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,92E+01	4,80E+01	1,26E+00	0,00E+00	-3,39E+01	1,39E+01
Energy (net calorific value) [MJ]	3,07E+01	4,88E+01	2,00E+00	0,00E+00	-3,41E+01	1,39E+01
Energy ren. (net calorific value) [MJ]	2,56E+00	2,14E+00	8,67E-01	0,00E+00	-1,16E+00	7,19E-01
Water consumption [kg]	1,25E+00	4,14E+00	1,01E+00	0,00E+00	-4,74E+00	8,35E-01
Air pollution [m ³]	1,41E+02	5,29E+02	7,11E+00	0,00E+00	-4,70E+02	7,44E+01
Water pollution [m ³]	3,27E-01	2,59E-01	2,87E-02	0,00E+00	-1,79E-01	2,18E-01
Hazardous waste for disposal [kg]	6,03E-07	3,61E-08	8,21E-10	0,00E+00	-2,69E-08	5,93E-07
Disposed of non-hazardous waste [kg]	1,52E-02	5,80E-02	1,40E-03	0,00E+00	-4,62E-02	2,07E-03
Disposed of radioactive waste [kg]	5,08E-04	2,65E-04	2,97E-04	0,00E+00	-7,10E-05	1,71E-05

evaluated from CML 2001, April. 2015

1.3.39 MP-U 47-52 1 ½" M8/10/½"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242367	MP-U 47-52 1 ½" M8/10/½"	25	2,329	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	2,454	5,347	0,112	0,000	-4,052	1,047
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	7,46E-15	7,17E-15	3,30E-15	0,00E+00	-3,18E-15	1,70E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,09E-02	1,18E-02	2,34E-04	0,00E+00	-9,56E-03	8,41E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	2,01E-03	1,15E-03	2,59E-05	0,00E+00	-8,88E-04	1,72E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,13E-03	1,63E-03	1,69E-05	0,00E+00	-1,43E-03	-2,34E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,85E-07	6,28E-08	3,70E-08	0,00E+00	3,35E-09	8,22E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,00E+01	4,93E+01	1,27E+00	0,00E+00	-3,48E+01	1,42E+01
Energy (net calorific value) [MJ]	3,14E+01	5,01E+01	2,03E+00	0,00E+00	-3,50E+01	1,43E+01
Energy ren. (net calorific value) [MJ]	2,62E+00	2,19E+00	8,78E-01	0,00E+00	-1,19E+00	7,39E-01
Water consumption [kg]	1,23E+00	4,22E+00	1,02E+00	0,00E+00	-4,87E+00	8,58E-01
Air pollution [m ³]	1,45E+02	5,44E+02	7,20E+00	0,00E+00	-4,83E+02	7,64E+01
Water pollution [m ³]	3,35E-01	2,66E-01	2,91E-02	0,00E+00	-1,83E-01	2,23E-01
Hazardous waste for disposal [kg]	6,19E-07	3,70E-08	8,31E-10	0,00E+00	-2,77E-08	6,09E-07
Disposed of non-hazardous waste [kg]	1,56E-02	5,96E-02	1,41E-03	0,00E+00	-4,75E-02	2,13E-03
Disposed of radioactive waste [kg]	5,19E-04	2,73E-04	3,01E-04	0,00E+00	-7,15E-05	1,75E-05

evaluated from CML 2001, April. 2015

1.3.40 MP-U 52-57 M8/10/½"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242368	MP-U 52-57 M8/10/½"	25	2,398	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	2,523	5,505	0,114	0,000	-4,174	1,078
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	7,65E-15	7,39E-15	3,35E-15	0,00E+00	-3,26E-15	1,75E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,12E-02	1,22E-02	2,37E-04	0,00E+00	-9,85E-03	8,66E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	2,06E-03	1,18E-03	2,62E-05	0,00E+00	-9,15E-04	1,77E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,19E-03	1,67E-03	1,71E-05	0,00E+00	-1,47E-03	-2,41E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	1,90E-07	6,42E-08	3,75E-08	0,00E+00	3,67E-09	8,47E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,08E+01	5,07E+01	1,29E+00	0,00E+00	-3,58E+01	1,47E+01
Energy (net calorific value) [MJ]	3,23E+01	5,16E+01	2,06E+00	0,00E+00	-3,60E+01	1,47E+01
Energy ren. (net calorific value) [MJ]	2,69E+00	2,26E+00	8,90E-01	0,00E+00	-1,22E+00	7,61E-01
Water consumption [kg]	1,22E+00	4,32E+00	1,03E+00	0,00E+00	-5,02E+00	8,83E-01
Air pollution [m ³]	1,48E+02	5,60E+02	7,29E+00	0,00E+00	-4,97E+02	7,87E+01
Water pollution [m ³]	3,45E-01	2,74E-01	2,95E-02	0,00E+00	-1,89E-01	2,30E-01
Hazardous waste for disposal [kg]	6,38E-07	3,81E-08	8,42E-10	0,00E+00	-2,85E-08	6,27E-07
Disposed of non-hazardous waste [kg]	1,61E-02	6,14E-02	1,43E-03	0,00E+00	-4,89E-02	2,19E-03
Disposed of radioactive waste [kg]	5,32E-04	2,81E-04	3,05E-04	0,00E+00	-7,20E-05	1,80E-05

evaluated from CML 2001, April. 2015

1.3.41 MP-U 57-62 2" M8/10¹/₂"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242369	MP-U 57-62 2" M8/10 ¹ / ₂ "	10	1,003	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	1,112	2,301	0,052	0,000	-1,691	0,451
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,00E-15	3,04E-15	1,51E-15	0,00E+00	-1,63E-15	7,31E-17
Acidification Potential (AP) [kg SO ₂ -eq.]	4,79E-03	5,14E-03	1,07E-04	0,00E+00	-4,08E-03	3,62E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	8,69E-04	4,94E-04	1,19E-05	0,00E+00	-3,79E-04	7,42E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-9,01E-04	7,07E-04	7,73E-06	0,00E+00	-6,09E-04	-1,01E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	8,02E-08	3,02E-08	1,69E-08	0,00E+00	-2,32E-09	3,54E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,36E+01	2,20E+01	5,87E-01	0,00E+00	-1,51E+01	6,13E+00
Energy (net calorific value) [MJ]	1,43E+01	2,24E+01	9,33E-01	0,00E+00	-1,52E+01	6,15E+00
Energy ren. (net calorific value) [MJ]	1,09E+00	9,49E-01	4,01E-01	0,00E+00	-5,80E-01	3,18E-01
Water consumption [kg]	1,12E+00	2,33E+00	4,66E-01	0,00E+00	-2,04E+00	3,70E-01
Air pollution [m ³]	6,54E+01	2,35E+02	3,30E+00	0,00E+00	-2,06E+02	3,29E+01
Water pollution [m ³]	1,42E-01	1,13E-01	1,33E-02	0,00E+00	-8,07E-02	9,62E-02
Hazardous waste for disposal [kg]	2,67E-07	1,57E-08	3,82E-10	0,00E+00	-1,19E-08	2,62E-07
Disposed of non-hazardous waste [kg]	6,71E-03	2,53E-02	6,48E-04	0,00E+00	-2,01E-02	9,15E-04
Disposed of radioactive waste [kg]	2,04E-04	1,16E-04	1,37E-04	0,00E+00	-5,62E-05	7,55E-06

evaluated from CML 2001, April. 2015

1.3.42 MP-U 62-67 M8/10/½"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242370	MP-U 62-67 M8/10/½"	10	1,030	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	1,139	2,363	0,052	0,000	-1,739	0,463
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,07E-15	3,12E-15	1,53E-15	0,00E+00	-1,66E-15	7,51E-17
Acidification Potential (AP) [kg SO ₂ -eq.]	4,91E-03	5,27E-03	1,08E-04	0,00E+00	-4,19E-03	3,72E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	8,92E-04	5,07E-04	1,20E-05	0,00E+00	-3,89E-04	7,62E-04
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-9,26E-04	7,26E-04	7,82E-06	0,00E+00	-6,26E-04	-1,03E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	8,21E-08	3,08E-08	1,71E-08	0,00E+00	-2,19E-09	3,64E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	1,39E+01	2,25E+01	5,94E-01	0,00E+00	-1,55E+01	6,30E+00
Energy (net calorific value) [MJ]	1,46E+01	2,30E+01	9,44E-01	0,00E+00	-1,56E+01	6,32E+00
Energy ren. (net calorific value) [MJ]	1,11E+00	9,74E-01	4,06E-01	0,00E+00	-5,92E-01	3,27E-01
Water consumption [kg]	1,11E+00	2,37E+00	4,72E-01	0,00E+00	-2,10E+00	3,79E-01
Air pollution [m ³]	6,69E+01	2,41E+02	3,34E+00	0,00E+00	-2,11E+02	3,38E+01
Water pollution [m ³]	1,45E-01	1,16E-01	1,35E-02	0,00E+00	-8,28E-02	9,88E-02
Hazardous waste for disposal [kg]	2,74E-07	1,61E-08	3,87E-10	0,00E+00	-1,22E-08	2,69E-07
Disposed of non-hazardous waste [kg]	6,88E-03	2,60E-02	6,55E-04	0,00E+00	-2,07E-02	9,40E-04
Disposed of radioactive waste [kg]	2,09E-04	1,19E-04	1,39E-04	0,00E+00	-5,64E-05	7,75E-06

evaluated from CML 2001, April. 2015

1.3.43 MP-U 67-72 M8/10/½"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242371	MP-U 67-72 M8/10/½"	10	1,546	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	1,770	3,289	0,443	0,000	-2,656	0,695
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,47E-14	3,85E-15	1,31E-14	0,00E+00	-2,27E-15	1,13E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	7,73E-03	7,55E-03	9,24E-04	0,00E+00	-6,32E-03	5,59E-03
Eutrophication Potential (EP) [kg (PO ₄) ³⁻ eq.]	1,37E-03	7,08E-04	1,02E-04	0,00E+00	-5,87E-04	1,14E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,34E-03	1,09E-03	6,65E-05	0,00E+00	-9,46E-04	-1,55E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,30E-07	2,93E-08	1,46E-07	0,00E+00	-9,78E-11	5,46E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,11E+01	2,98E+01	5,01E+00	0,00E+00	-2,32E+01	9,45E+00
Energy (net calorific value) [MJ]	2,45E+01	3,03E+01	8,00E+00	0,00E+00	-2,33E+01	9,48E+00
Energy ren. (net calorific value) [MJ]	4,40E+00	1,28E+00	3,47E+00	0,00E+00	-8,33E-01	4,90E-01
Water consumption [kg]	5,79E+00	4,38E+00	4,04E+00	0,00E+00	-3,20E+00	5,70E-01
Air pollution [m ³]	1,25E+02	3,65E+02	2,85E+01	0,00E+00	-3,19E+02	5,07E+01
Water pollution [m ³]	2,98E-01	1,57E-01	1,15E-01	0,00E+00	-1,23E-01	1,48E-01
Hazardous waste for disposal [kg]	4,12E-07	2,27E-08	3,28E-09	0,00E+00	-1,84E-08	4,04E-07
Disposed of non-hazardous waste [kg]	1,28E-02	3,72E-02	5,59E-03	0,00E+00	-3,13E-02	1,41E-03
Disposed of radioactive waste [kg]	1,29E-03	1,55E-04	1,19E-03	0,00E+00	-6,33E-05	1,16E-05

evaluated from CML 2001, April. 2015

1.3.44 MP-U 72-77 2 ½" M8/10/½"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242372	MP-U 72-77 2 ½" M8/10/½"	10	1,594	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	1,824	3,387	0,462	0,000	-2,742	0,716
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,54E-14	3,96E-15	1,36E-14	0,00E+00	-2,33E-15	1,16E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	7,98E-03	7,77E-03	9,66E-04	0,00E+00	-6,52E-03	5,76E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	1,41E-03	7,29E-04	1,07E-04	0,00E+00	-6,06E-04	1,18E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,38E-03	1,13E-03	6,95E-05	0,00E+00	-9,76E-04	-1,60E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,39E-07	2,96E-08	1,53E-07	0,00E+00	1,30E-10	5,63E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,17E+01	3,06E+01	5,24E+00	0,00E+00	-2,39E+01	9,74E+00
Energy (net calorific value) [MJ]	2,52E+01	3,11E+01	8,36E+00	0,00E+00	-2,40E+01	9,77E+00
Energy ren. (net calorific value) [MJ]	4,59E+00	1,31E+00	3,62E+00	0,00E+00	-8,54E-01	5,06E-01
Water consumption [kg]	6,02E+00	4,51E+00	4,22E+00	0,00E+00	-3,30E+00	5,87E-01
Air pollution [m ³]	1,29E+02	3,76E+02	2,98E+01	0,00E+00	-3,29E+02	5,23E+01
Water pollution [m ³]	3,08E-01	1,62E-01	1,20E-01	0,00E+00	-1,26E-01	1,53E-01
Hazardous waste for disposal [kg]	4,25E-07	2,34E-08	3,42E-09	0,00E+00	-1,89E-08	4,17E-07
Disposed of non-hazardous waste [kg]	1,33E-02	3,83E-02	5,83E-03	0,00E+00	-3,23E-02	1,45E-03
Disposed of radioactive waste [kg]	1,35E-03	1,60E-04	1,24E-03	0,00E+00	-6,36E-05	1,20E-05

evaluated from CML 2001, April. 2015

1.3.45 MP-U 77-82 M8/10/½"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242373	MP-U 77-82 M8/10/½"	10	1,642	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	1,877	3,485	0,482	0,000	-2,828	0,738
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,60E-14	4,06E-15	1,42E-14	0,00E+00	-2,38E-15	1,20E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	8,22E-03	8,00E-03	1,01E-03	0,00E+00	-6,72E-03	5,93E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	1,45E-03	7,50E-04	1,11E-04	0,00E+00	-6,24E-04	1,21E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,42E-03	1,16E-03	7,25E-05	0,00E+00	-1,01E-03	-1,65E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,47E-07	2,98E-08	1,59E-07	0,00E+00	3,58E-10	5,80E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,23E+01	3,14E+01	5,46E+00	0,00E+00	-2,46E+01	1,00E+01
Energy (net calorific value) [MJ]	2,60E+01	3,20E+01	8,71E+00	0,00E+00	-2,48E+01	1,01E+01
Energy ren. (net calorific value) [MJ]	4,77E+00	1,35E+00	3,78E+00	0,00E+00	-8,76E-01	5,21E-01
Water consumption [kg]	6,24E+00	4,64E+00	4,40E+00	0,00E+00	-3,41E+00	6,05E-01
Air pollution [m ³]	1,34E+02	3,88E+02	3,11E+01	0,00E+00	-3,39E+02	5,39E+01
Water pollution [m ³]	3,19E-01	1,66E-01	1,25E-01	0,00E+00	-1,30E-01	1,58E-01
Hazardous waste for disposal [kg]	4,38E-07	2,40E-08	3,57E-09	0,00E+00	-1,95E-08	4,30E-07
Disposed of non-hazardous waste [kg]	1,37E-02	3,94E-02	6,08E-03	0,00E+00	-3,33E-02	1,50E-03
Disposed of radioactive waste [kg]	1,41E-03	1,64E-04	1,29E-03	0,00E+00	-6,40E-05	1,24E-05

evaluated from CML 2001, April. 2015

1.3.46 MP-U 83-89 3" M8/10¹/₂"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242374	MP-U 83-89 3" M8/10 ¹ / ₂ "	10	1,711	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	1,953	3,624	0,510	0,000	-2,950	0,769
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,69E-14	4,21E-15	1,50E-14	0,00E+00	-2,46E-15	1,25E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	8,56E-03	8,32E-03	1,07E-03	0,00E+00	-7,00E-03	6,18E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	1,51E-03	7,80E-04	1,18E-04	0,00E+00	-6,51E-04	1,27E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,48E-03	1,21E-03	7,67E-05	0,00E+00	-1,05E-03	-1,72E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,60E-07	3,01E-08	1,69E-07	0,00E+00	6,82E-10	6,04E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,32E+01	3,26E+01	5,78E+00	0,00E+00	-2,56E+01	1,05E+01
Energy (net calorific value) [MJ]	2,71E+01	3,32E+01	9,22E+00	0,00E+00	-2,58E+01	1,05E+01
Energy ren. (net calorific value) [MJ]	5,03E+00	1,40E+00	4,00E+00	0,00E+00	-9,07E-01	5,43E-01
Water consumption [kg]	6,56E+00	4,83E+00	4,66E+00	0,00E+00	-3,55E+00	6,30E-01
Air pollution [m ³]	1,40E+02	4,04E+02	3,29E+01	0,00E+00	-3,54E+02	5,61E+01
Water pollution [m ³]	3,34E-01	1,73E-01	1,32E-01	0,00E+00	-1,35E-01	1,64E-01
Hazardous waste for disposal [kg]	4,56E-07	2,50E-08	3,78E-09	0,00E+00	-2,03E-08	4,47E-07
Disposed of non-hazardous waste [kg]	1,43E-02	4,11E-02	6,44E-03	0,00E+00	-3,47E-02	1,56E-03
Disposed of radioactive waste [kg]	1,49E-03	1,70E-04	1,37E-03	0,00E+00	-6,46E-05	1,29E-05

evaluated from CML 2001, April. 2015

1.3.47 MP-U 89-95 M8/10/½"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242375	MP-U 89-95 M8/10/½"	10	1,769	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	2,017	3,742	0,534	0,000	-3,054	0,795
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,77E-14	4,34E-15	1,57E-14	0,00E+00	-2,53E-15	1,29E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	8,85E-03	8,59E-03	1,11E-03	0,00E+00	-7,24E-03	6,39E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	1,56E-03	8,05E-04	1,23E-04	0,00E+00	-6,73E-04	1,31E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,53E-03	1,25E-03	8,03E-05	0,00E+00	-1,08E-03	-1,77E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,70E-07	3,04E-08	1,76E-07	0,00E+00	9,56E-10	6,24E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,39E+01	3,36E+01	6,05E+00	0,00E+00	-2,65E+01	1,08E+01
Energy (net calorific value) [MJ]	2,80E+01	3,42E+01	9,65E+00	0,00E+00	-2,66E+01	1,08E+01
Energy ren. (net calorific value) [MJ]	5,25E+00	1,44E+00	4,18E+00	0,00E+00	-9,33E-01	5,61E-01
Water consumption [kg]	6,83E+00	4,98E+00	4,87E+00	0,00E+00	-3,68E+00	6,52E-01
Air pollution [m ³]	1,45E+02	4,18E+02	3,44E+01	0,00E+00	-3,66E+02	5,80E+01
Water pollution [m ³]	3,47E-01	1,78E-01	1,39E-01	0,00E+00	-1,40E-01	1,70E-01
Hazardous waste for disposal [kg]	4,71E-07	2,58E-08	3,95E-09	0,00E+00	-2,10E-08	4,63E-07
Disposed of non-hazardous waste [kg]	1,48E-02	4,24E-02	6,74E-03	0,00E+00	-3,59E-02	1,61E-03
Disposed of radioactive waste [kg]	1,56E-03	1,76E-04	1,43E-03	0,00E+00	-6,50E-05	1,33E-05

evaluated from CML 2001, April. 2015

1.3.48 MP-U 95-101 M8/10/½"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242376	MP-U 95-101 M8/10/½"	10	1,826	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	2,081	3,859	0,557	0,000	-3,156	0,821
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	1,84E-14	4,47E-15	1,64E-14	0,00E+00	-2,59E-15	1,33E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	9,14E-03	8,87E-03	1,16E-03	0,00E+00	-7,48E-03	6,60E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	1,61E-03	8,31E-04	1,29E-04	0,00E+00	-6,95E-04	1,35E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,58E-03	1,29E-03	8,38E-05	0,00E+00	-1,12E-03	-1,83E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	2,81E-07	3,07E-08	1,84E-07	0,00E+00	1,23E-09	6,45E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	2,47E+01	3,46E+01	6,31E+00	0,00E+00	-2,73E+01	1,12E+01
Energy (net calorific value) [MJ]	2,89E+01	3,51E+01	1,01E+01	0,00E+00	-2,75E+01	1,12E+01
Energy ren. (net calorific value) [MJ]	5,48E+00	1,49E+00	4,37E+00	0,00E+00	-9,59E-01	5,79E-01
Water consumption [kg]	7,10E+00	5,14E+00	5,09E+00	0,00E+00	-3,80E+00	6,73E-01
Air pollution [m ³]	1,50E+02	4,31E+02	3,59E+01	0,00E+00	-3,78E+02	5,99E+01
Water pollution [m ³]	3,59E-01	1,84E-01	1,45E-01	0,00E+00	-1,44E-01	1,75E-01
Hazardous waste for disposal [kg]	4,87E-07	2,65E-08	4,13E-09	0,00E+00	-2,17E-08	4,78E-07
Disposed of non-hazardous waste [kg]	1,54E-02	4,38E-02	7,03E-03	0,00E+00	-3,71E-02	1,67E-03
Disposed of radioactive waste [kg]	1,62E-03	1,81E-04	1,50E-03	0,00E+00	-6,55E-05	1,37E-05

evaluated from CML 2001, April. 2015

1.3.49 MP-U 102-108 M8/10/½"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242377	MP-U 102-108 M8/10/½"	10	2,304	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	2,611	4,832	0,753	0,000	-4,010	1,035
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,48E-14	5,52E-15	2,22E-14	0,00E+00	-3,14E-15	1,68E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,16E-02	1,11E-02	1,57E-03	0,00E+00	-9,46E-03	8,32E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	2,04E-03	1,04E-03	1,74E-04	0,00E+00	-8,79E-04	1,70E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-1,99E-03	1,62E-03	1,13E-04	0,00E+00	-1,42E-03	-2,31E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,67E-07	3,31E-08	2,49E-07	0,00E+00	3,46E-09	8,13E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,09E+01	4,27E+01	8,53E+00	0,00E+00	-3,44E+01	1,41E+01
Energy (net calorific value) [MJ]	3,65E+01	4,34E+01	1,36E+01	0,00E+00	-3,46E+01	1,41E+01
Energy ren. (net calorific value) [MJ]	7,31E+00	1,85E+00	5,90E+00	0,00E+00	-1,18E+00	7,31E-01
Water consumption [kg]	9,32E+00	6,42E+00	6,88E+00	0,00E+00	-4,82E+00	8,49E-01
Air pollution [m ³]	1,91E+02	5,45E+02	4,86E+01	0,00E+00	-4,78E+02	7,56E+01
Water pollution [m ³]	4,64E-01	2,29E-01	1,96E-01	0,00E+00	-1,81E-01	2,21E-01
Hazardous waste for disposal [kg]	6,14E-07	3,30E-08	5,58E-09	0,00E+00	-2,74E-08	6,03E-07
Disposed of non-hazardous waste [kg]	1,97E-02	5,51E-02	9,51E-03	0,00E+00	-4,70E-02	2,10E-03
Disposed of radioactive waste [kg]	2,19E-03	2,25E-04	2,02E-03	0,00E+00	-6,96E-05	1,73E-05

evaluated from CML 2001, April. 2015

1.3.50 MP-U 109-115 4" M8/10/1/2"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242378	MP-U 109-115 4" M8/10/1/2"	10	2,397	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	2,755	5,022	0,790	0,000	-4,135	1,077
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,57E-14	5,69E-15	2,33E-14	0,00E+00	-3,44E-15	1,75E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,21E-02	1,16E-02	1,65E-03	0,00E+00	-9,81E-03	8,66E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	2,13E-03	1,08E-03	1,83E-04	0,00E+00	-9,12E-04	1,77E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,06E-03	1,69E-03	1,19E-04	0,00E+00	-1,47E-03	-2,40E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,83E-07	3,63E-08	2,61E-07	0,00E+00	1,05E-09	8,46E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,26E+01	4,49E+01	8,95E+00	0,00E+00	-3,59E+01	1,46E+01
Energy (net calorific value) [MJ]	3,85E+01	4,57E+01	1,43E+01	0,00E+00	-3,61E+01	1,47E+01
Energy ren. (net calorific value) [MJ]	7,61E+00	1,92E+00	6,19E+00	0,00E+00	-1,27E+00	7,60E-01
Water consumption [kg]	1,02E+01	7,04E+00	7,21E+00	0,00E+00	-4,98E+00	8,83E-01
Air pollution [m ³]	2,01E+02	5,67E+02	5,10E+01	0,00E+00	-4,95E+02	7,87E+01
Water pollution [m ³]	4,82E-01	2,37E-01	2,05E-01	0,00E+00	-1,90E-01	2,30E-01
Hazardous waste for disposal [kg]	6,38E-07	3,41E-08	5,85E-09	0,00E+00	-2,85E-08	6,27E-07
Disposed of non-hazardous waste [kg]	2,05E-02	5,70E-02	9,97E-03	0,00E+00	-4,87E-02	2,19E-03
Disposed of radioactive waste [kg]	2,28E-03	2,33E-04	2,12E-03	0,00E+00	-8,96E-05	1,80E-05

evaluated from CML 2001, April. 2015

1.3.51 MP-U 115-121 M8/10/½"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242379	MP-U 115-121 M8/10/½"	10	2,466	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	2,831	5,163	0,819	0,000	-4,258	1,108
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,67E-14	5,85E-15	2,41E-14	0,00E+00	-3,52E-15	1,80E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,24E-02	1,19E-02	1,71E-03	0,00E+00	-1,01E-02	8,91E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	2,19E-03	1,11E-03	1,89E-04	0,00E+00	-9,38E-04	1,82E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,12E-03	1,74E-03	1,23E-04	0,00E+00	-1,51E-03	-2,47E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	3,96E-07	3,66E-08	2,70E-07	0,00E+00	1,38E-09	8,71E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,35E+01	4,61E+01	9,27E+00	0,00E+00	-3,69E+01	1,51E+01
Energy (net calorific value) [MJ]	3,96E+01	4,69E+01	1,48E+01	0,00E+00	-3,71E+01	1,51E+01
Energy ren. (net calorific value) [MJ]	7,87E+00	1,97E+00	6,41E+00	0,00E+00	-1,30E+00	7,82E-01
Water consumption [kg]	1,05E+01	7,22E+00	7,47E+00	0,00E+00	-5,13E+00	9,08E-01
Air pollution [m ³]	2,07E+02	5,83E+02	5,28E+01	0,00E+00	-5,10E+02	8,09E+01
Water pollution [m ³]	4,97E-01	2,43E-01	2,13E-01	0,00E+00	-1,95E-01	2,37E-01
Hazardous waste for disposal [kg]	6,57E-07	3,51E-08	6,06E-09	0,00E+00	-2,93E-08	6,45E-07
Disposed of non-hazardous waste [kg]	2,11E-02	5,87E-02	1,03E-02	0,00E+00	-5,01E-02	2,25E-03
Disposed of radioactive waste [kg]	2,36E-03	2,39E-04	2,20E-03	0,00E+00	-9,02E-05	1,86E-05

evaluated from CML 2001, April. 2015

1.3.52 MP-U 121-127 M8/10/½"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242380	MP-U 121-127 M8/10/½"	10	2,535	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	2,908	5,304	0,847	0,000	-4,382	1,139
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,76E-14	6,00E-15	2,50E-14	0,00E+00	-3,60E-15	1,85E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,28E-02	1,22E-02	1,77E-03	0,00E+00	-1,04E-02	9,16E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	2,25E-03	1,14E-03	1,96E-04	0,00E+00	-9,65E-04	1,88E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,18E-03	1,79E-03	1,27E-04	0,00E+00	-1,55E-03	-2,54E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	4,08E-07	3,70E-08	2,80E-07	0,00E+00	1,70E-09	8,95E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,44E+01	4,72E+01	9,60E+00	0,00E+00	-3,79E+01	1,55E+01
Energy (net calorific value) [MJ]	4,07E+01	4,81E+01	1,53E+01	0,00E+00	-3,82E+01	1,55E+01
Energy ren. (net calorific value) [MJ]	8,14E+00	2,03E+00	6,64E+00	0,00E+00	-1,33E+00	8,04E-01
Water consumption [kg]	1,08E+01	7,41E+00	7,73E+00	0,00E+00	-5,27E+00	9,34E-01
Air pollution [m ³]	2,13E+02	6,00E+02	5,46E+01	0,00E+00	-5,24E+02	8,32E+01
Water pollution [m ³]	5,13E-01	2,50E-01	2,20E-01	0,00E+00	-2,00E-01	2,43E-01
Hazardous waste for disposal [kg]	6,75E-07	3,60E-08	6,27E-09	0,00E+00	-3,01E-08	6,63E-07
Disposed of non-hazardous waste [kg]	2,17E-02	6,03E-02	1,07E-02	0,00E+00	-5,16E-02	2,31E-03
Disposed of radioactive waste [kg]	2,45E-03	2,46E-04	2,27E-03	0,00E+00	-9,07E-05	1,91E-05

evaluated from CML 2001, April. 2015

1.3.53 MP-U 128-134 M8/10/½"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242235	MP-U 128-134 M8/10/½"	10	2,616	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	2,998	5,469	0,880	0,000	-4,527	1,176
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,86E-14	6,18E-15	2,60E-14	0,00E+00	-3,69E-15	1,91E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,32E-02	1,26E-02	1,84E-03	0,00E+00	-1,07E-02	9,45E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	2,32E-03	1,18E-03	2,03E-04	0,00E+00	-9,96E-04	1,94E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,25E-03	1,85E-03	1,32E-04	0,00E+00	-1,61E-03	-2,62E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	4,23E-07	3,74E-08	2,91E-07	0,00E+00	2,09E-09	9,24E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,54E+01	4,86E+01	9,97E+00	0,00E+00	-3,92E+01	1,60E+01
Energy (net calorific value) [MJ]	4,20E+01	4,94E+01	1,59E+01	0,00E+00	-3,94E+01	1,60E+01
Energy ren. (net calorific value) [MJ]	8,45E+00	2,09E+00	6,90E+00	0,00E+00	-1,37E+00	8,30E-01
Water consumption [kg]	1,12E+01	7,63E+00	8,03E+00	0,00E+00	-5,45E+00	9,64E-01
Air pollution [m ³]	2,20E+02	6,19E+02	5,68E+01	0,00E+00	-5,41E+02	8,59E+01
Water pollution [m ³]	5,30E-01	2,57E-01	2,29E-01	0,00E+00	-2,07E-01	2,51E-01
Hazardous waste for disposal [kg]	6,97E-07	3,71E-08	6,52E-09	0,00E+00	-3,11E-08	6,84E-07
Disposed of non-hazardous waste [kg]	2,25E-02	6,22E-02	1,11E-02	0,00E+00	-5,32E-02	2,39E-03
Disposed of radioactive waste [kg]	2,54E-03	2,53E-04	2,36E-03	0,00E+00	-9,14E-05	1,97E-05

evaluated from CML 2001, April. 2015

1.3.54 MP-U 135-141 5" M8/10/1/2"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2242332	MP-U 135-141 5" M8/10/1/2"	10	2,697	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	3,088	5,633	0,913	0,000	-4,671	1,212
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	2,97E-14	6,35E-15	2,69E-14	0,00E+00	-3,78E-15	1,97E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,36E-02	1,30E-02	1,91E-03	0,00E+00	-1,11E-02	9,74E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	2,39E-03	1,21E-03	2,11E-04	0,00E+00	-1,03E-03	1,99E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,32E-03	1,91E-03	1,37E-04	0,00E+00	-1,66E-03	-2,71E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	4,37E-07	3,78E-08	3,02E-07	0,00E+00	2,47E-09	9,52E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,65E+01	5,00E+01	1,03E+01	0,00E+00	-4,04E+01	1,65E+01
Energy (net calorific value) [MJ]	4,33E+01	5,08E+01	1,65E+01	0,00E+00	-4,06E+01	1,65E+01
Energy ren. (net calorific value) [MJ]	8,76E+00	2,15E+00	7,16E+00	0,00E+00	-1,40E+00	8,56E-01
Water consumption [kg]	1,16E+01	7,84E+00	8,34E+00	0,00E+00	-5,62E+00	9,94E-01
Air pollution [m ³]	2,27E+02	6,38E+02	5,89E+01	0,00E+00	-5,58E+02	8,85E+01
Water pollution [m ³]	5,48E-01	2,65E-01	2,37E-01	0,00E+00	-2,13E-01	2,59E-01
Hazardous waste for disposal [kg]	7,18E-07	3,82E-08	6,76E-09	0,00E+00	-3,20E-08	7,05E-07
Disposed of non-hazardous waste [kg]	2,32E-02	6,41E-02	1,15E-02	0,00E+00	-5,49E-02	2,46E-03
Disposed of radioactive waste [kg]	2,64E-03	2,60E-04	2,45E-03	0,00E+00	-9,20E-05	2,03E-05

evaluated from CML 2001, April. 2015

1.3.55 MP-U 141-147 M8/10/½"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2305357	MP-U 141-147 M8/10/½"	10	2,766	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	3,164	5,774	0,942	0,000	-4,795	1,243
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,06E-14	6,51E-15	2,78E-14	0,00E+00	-3,86E-15	2,02E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,40E-02	1,33E-02	1,97E-03	0,00E+00	-1,13E-02	9,99E-03
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	2,45E-03	1,24E-03	2,18E-04	0,00E+00	-1,05E-03	2,05E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,38E-03	1,95E-03	1,42E-04	0,00E+00	-1,70E-03	-2,78E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	4,50E-07	3,81E-08	3,11E-07	0,00E+00	2,80E-09	9,77E-08
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	3,74E+01	5,12E+01	1,07E+01	0,00E+00	-4,14E+01	1,69E+01
Energy (net calorific value) [MJ]	4,44E+01	5,20E+01	1,70E+01	0,00E+00	-4,16E+01	1,70E+01
Energy ren. (net calorific value) [MJ]	9,02E+00	2,20E+00	7,38E+00	0,00E+00	-1,44E+00	8,78E-01
Water consumption [kg]	1,19E+01	8,03E+00	8,60E+00	0,00E+00	-5,77E+00	1,02E+00
Air pollution [m ³]	2,33E+02	6,55E+02	6,07E+01	0,00E+00	-5,73E+02	9,08E+01
Water pollution [m ³]	5,63E-01	2,72E-01	2,45E-01	0,00E+00	-2,18E-01	2,65E-01
Hazardous waste for disposal [kg]	7,37E-07	3,92E-08	6,97E-09	0,00E+00	-3,29E-08	7,24E-07
Disposed of non-hazardous waste [kg]	2,38E-02	6,58E-02	1,19E-02	0,00E+00	-5,64E-02	2,52E-03
Disposed of radioactive waste [kg]	2,72E-03	2,67E-04	2,53E-03	0,00E+00	-9,26E-05	2,08E-05

evaluated from CML 2001, April. 2015

1.3.56 MP-U 147-153 M8/10/½"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2305358	MP-U 147-153 M8/10/½"	10	3,094	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	3,596	6,442	1,075	0,000	-5,312	1,390
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,45E-14	7,18E-15	3,17E-14	0,00E+00	-4,56E-15	2,25E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,57E-02	1,49E-02	2,24E-03	0,00E+00	-1,26E-02	1,12E-02
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	2,75E-03	1,39E-03	2,48E-04	0,00E+00	-1,18E-03	2,29E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,64E-03	2,19E-03	1,62E-04	0,00E+00	-1,89E-03	-3,10E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	5,08E-07	4,43E-08	3,55E-07	0,00E+00	-4,08E-10	1,09E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	4,25E+01	5,78E+01	1,22E+01	0,00E+00	-4,64E+01	1,89E+01
Energy (net calorific value) [MJ]	5,05E+01	5,88E+01	1,94E+01	0,00E+00	-4,67E+01	1,90E+01
Energy ren. (net calorific value) [MJ]	1,02E+01	2,45E+00	8,42E+00	0,00E+00	-1,67E+00	9,81E-01
Water consumption [kg]	1,41E+01	9,53E+00	9,80E+00	0,00E+00	-6,40E+00	1,14E+00
Air pollution [m ³]	2,65E+02	7,33E+02	6,93E+01	0,00E+00	-6,38E+02	1,02E+02
Water pollution [m ³]	6,31E-01	3,01E-01	2,79E-01	0,00E+00	-2,46E-01	2,97E-01
Hazardous waste for disposal [kg]	8,24E-07	4,33E-08	7,96E-09	0,00E+00	-3,67E-08	8,09E-07
Disposed of non-hazardous waste [kg]	2,67E-02	7,30E-02	1,36E-02	0,00E+00	-6,27E-02	2,82E-03
Disposed of radioactive waste [kg]	3,07E-03	2,95E-04	2,88E-03	0,00E+00	-1,27E-04	2,33E-05

evaluated from CML 2001, April. 2015

1.3.57 MP-U 153-159 M8/10/½"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2305359	MP-U 153-159 M8/10/½"	10	3,170	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	3,680	6,597	1,106	0,000	-5,447	1,425
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,55E-14	7,35E-15	3,26E-14	0,00E+00	-4,64E-15	2,31E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,61E-02	1,53E-02	2,31E-03	0,00E+00	-1,30E-02	1,14E-02
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	2,82E-03	1,42E-03	2,55E-04	0,00E+00	-1,20E-03	2,34E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,71E-03	2,25E-03	1,66E-04	0,00E+00	-1,94E-03	-3,18E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	5,22E-07	4,47E-08	3,65E-07	0,00E+00	-4,79E-11	1,12E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	4,34E+01	5,91E+01	1,25E+01	0,00E+00	-4,75E+01	1,94E+01
Energy (net calorific value) [MJ]	5,17E+01	6,01E+01	2,00E+01	0,00E+00	-4,78E+01	1,94E+01
Energy ren. (net calorific value) [MJ]	1,05E+01	2,51E+00	8,66E+00	0,00E+00	-1,70E+00	1,01E+00
Water consumption [kg]	1,44E+01	9,73E+00	1,01E+01	0,00E+00	-6,56E+00	1,17E+00
Air pollution [m ³]	2,72E+02	7,51E+02	7,13E+01	0,00E+00	-6,54E+02	1,04E+02
Water pollution [m ³]	6,48E-01	3,08E-01	2,87E-01	0,00E+00	-2,52E-01	3,04E-01
Hazardous waste for disposal [kg]	8,44E-07	4,44E-08	8,19E-09	0,00E+00	-3,76E-08	8,29E-07
Disposed of non-hazardous waste [kg]	2,74E-02	7,48E-02	1,40E-02	0,00E+00	-6,43E-02	2,89E-03
Disposed of radioactive waste [kg]	3,16E-03	3,02E-04	2,97E-03	0,00E+00	-1,28E-04	2,39E-05

evaluated from CML 2001, April. 2015

1.3.58 MP-U 160-166 6" M8/10/1/2"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2305360	MP-U 160-166 6" M8/10/1/2"	10	3,259	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	3,779	6,779	1,142	0,000	-5,607	1,465
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,67E-14	7,54E-15	3,37E-14	0,00E+00	-4,74E-15	2,37E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,66E-02	1,57E-02	2,39E-03	0,00E+00	-1,33E-02	1,18E-02
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	2,90E-03	1,46E-03	2,64E-04	0,00E+00	-1,24E-03	2,41E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,79E-03	2,31E-03	1,72E-04	0,00E+00	-2,00E-03	-3,27E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	5,38E-07	4,51E-08	3,77E-07	0,00E+00	3,75E-10	1,15E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	4,46E+01	6,06E+01	1,29E+01	0,00E+00	-4,88E+01	1,99E+01
Energy (net calorific value) [MJ]	5,31E+01	6,16E+01	2,07E+01	0,00E+00	-4,92E+01	2,00E+01
Energy ren. (net calorific value) [MJ]	1,08E+01	2,58E+00	8,95E+00	0,00E+00	-1,74E+00	1,03E+00
Water consumption [kg]	1,48E+01	9,97E+00	1,04E+01	0,00E+00	-6,75E+00	1,20E+00
Air pollution [m ³]	2,80E+02	7,72E+02	7,36E+01	0,00E+00	-6,73E+02	1,07E+02
Water pollution [m ³]	6,67E-01	3,17E-01	2,97E-01	0,00E+00	-2,58E-01	3,13E-01
Hazardous waste for disposal [kg]	8,68E-07	4,56E-08	8,46E-09	0,00E+00	-3,87E-08	8,52E-07
Disposed of non-hazardous waste [kg]	2,82E-02	7,70E-02	1,44E-02	0,00E+00	-6,61E-02	2,97E-03
Disposed of radioactive waste [kg]	3,27E-03	3,11E-04	3,06E-03	0,00E+00	-1,29E-04	2,45E-05

evaluated from CML 2001, April. 2015

1.3.59 MP-U 166-172 M8/10/½"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2305361	MP-U 166-172 M8/10/½"	10	3,335	Steel, Polymer

Enviromental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	3,863	6,934	1,174	0,000	-5,743	1,499
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,77E-14	7,71E-15	3,46E-14	0,00E+00	-4,83E-15	2,43E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,69E-02	1,61E-02	2,45E-03	0,00E+00	-1,36E-02	1,20E-02
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	2,96E-03	1,49E-03	2,71E-04	0,00E+00	-1,27E-03	2,47E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,85E-03	2,36E-03	1,76E-04	0,00E+00	-2,04E-03	-3,35E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	5,52E-07	4,55E-08	3,88E-07	0,00E+00	7,36E-10	1,18E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	4,56E+01	6,19E+01	1,33E+01	0,00E+00	-5,00E+01	2,04E+01
Energy (net calorific value) [MJ]	5,43E+01	6,30E+01	2,12E+01	0,00E+00	-5,03E+01	2,04E+01
Energy ren. (net calorific value) [MJ]	1,11E+01	2,64E+00	9,19E+00	0,00E+00	-1,78E+00	1,06E+00
Water consumption [kg]	1,52E+01	1,02E+01	1,07E+01	0,00E+00	-6,92E+00	1,23E+00
Air pollution [m ³]	2,86E+02	7,90E+02	7,56E+01	0,00E+00	-6,89E+02	1,09E+02
Water pollution [m ³]	6,84E-01	3,24E-01	3,05E-01	0,00E+00	-2,64E-01	3,20E-01
Hazardous waste for disposal [kg]	8,88E-07	4,66E-08	8,69E-09	0,00E+00	-3,96E-08	8,72E-07
Disposed of non-hazardous waste [kg]	2,89E-02	7,88E-02	1,48E-02	0,00E+00	-6,77E-02	3,04E-03
Disposed of radioactive waste [kg]	3,36E-03	3,18E-04	3,15E-03	0,00E+00	-1,29E-04	2,51E-05

evaluated from CML 2001, April. 2015

1.3.60 MP-U 170-176 M8/10/½"

IT- Number	Product name	Pcs. per Sales pack	Weight [kg]	Material
2305362	MP-U 170-176 M8/10/½"	10	3,387	Steel, Polymer

Environmental impact category	Total	Raw material	Production	Use	End of life	Transportation
Global Warming Potential (GWP 100 years) [kg CO ₂ -eq.]	3,920	7,039	1,195	0,000	-5,835	1,522
Ozone Depletion Potential (ODP, catalytic) [kg R11-eq.]	3,84E-14	7,82E-15	3,52E-14	0,00E+00	-4,89E-15	2,47E-16
Acidification Potential (AP) [kg SO ₂ -eq.]	1,72E-02	1,63E-02	2,50E-03	0,00E+00	-1,39E-02	1,22E-02
Eutrication Potential (EP) [kg (PO ₄) ³⁻ eq.]	3,01E-03	1,52E-03	2,76E-04	0,00E+00	-1,29E-03	2,51E-03
Photochemical Oxidant Potential (POCP) [kg Ethene-eq.]	-2,90E-03	2,40E-03	1,80E-04	0,00E+00	-2,07E-03	-3,40E-03
Abiotic Depletion Potential non-Fossil Resources (ADPE) [kg Sb-eq.]	5,61E-07	4,58E-08	3,95E-07	0,00E+00	9,80E-10	1,20E-07
Abiotic Depletion Potential Fossil Fuels (ADPF) [MJ]	4,62E+01	6,27E+01	1,35E+01	0,00E+00	-5,07E+01	2,07E+01
Energy (net calorific value) [MJ]	5,52E+01	6,39E+01	2,16E+01	0,00E+00	-5,11E+01	2,08E+01
Energy ren. (net calorific value) [MJ]	1,13E+01	2,67E+00	9,36E+00	0,00E+00	-1,80E+00	1,07E+00
Water consumption [kg]	1,54E+01	1,03E+01	1,09E+01	0,00E+00	-7,03E+00	1,25E+00
Air pollution [m ³]	2,91E+02	8,02E+02	7,70E+01	0,00E+00	-7,00E+02	1,11E+02
Water pollution [m ³]	6,95E-01	3,29E-01	3,10E-01	0,00E+00	-2,68E-01	3,25E-01
Hazardous waste for disposal [kg]	9,02E-07	4,73E-08	8,85E-09	0,00E+00	-4,02E-08	8,86E-07
Disposed of non-hazardous waste [kg]	2,94E-02	8,00E-02	1,51E-02	0,00E+00	-6,88E-02	3,09E-03
Disposed of radioactive waste [kg]	3,42E-03	3,22E-04	3,20E-03	0,00E+00	-1,30E-04	2,55E-05

evaluated from CML 2001, April. 2015