Environmental product declaration for paper

**Product**
MetsäBoard Natural FBB 175–325 g/m²

**Company**
Metsä Board

**Mill**
Husum, Sweden

Information gathered from 1.1.2019 to 31.12.2019

Date of issue 11.5.2020

Environmental Management

Certified environmental management system at the mill since 1997

Company systems ensure traceability of the origin of wood [ ] yes [ ] no

Certified environmental management system for wood procurement and board and pulp production according to ISO 14001. Certified PEFC™ Chain of Custody (No. 5328-06) and FSC® Chain of Custody (No. INS-COC-100100). Certificates are available at metsaboard.com.

Environmental parameters

The figures are based on methods and procedures of measurement approved by the local (or national) environmental regulators at the production site. The figures include both paper and pulp production.

<table>
<thead>
<tr>
<th>Water</th>
<th>COD</th>
<th>kg/tonne</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AOX</td>
<td>0.033</td>
</tr>
<tr>
<td></td>
<td>Nₑₒₜ</td>
<td>0.118</td>
</tr>
<tr>
<td></td>
<td>Pₚₒₜ</td>
<td>0.014</td>
</tr>
</tbody>
</table>

Air

<table>
<thead>
<tr>
<th>SO₂</th>
<th>kg/tonne</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.21</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NOₓ</th>
<th>kg/tonne</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.01</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CO₂ (fossil)</th>
<th>kg/tonne</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>54</td>
</tr>
</tbody>
</table>

Solid waste landfilled

<table>
<thead>
<tr>
<th>BDkg/tonne</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

Purchased electricity consumption

<table>
<thead>
<tr>
<th>kWh/tonne of final product</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,496</td>
</tr>
</tbody>
</table>

Product composition

- Binders 5%
- Pigments and fillers 3%
- Chemical pulp 51%
- CTMP 51%
- Moisture 8%

This product contains biomass carbon, equivalent to 1,547 kg of CO₂ per tonne of paper.

More information

Contact
Maria Alsén

Address
Metsä Board Husum Mill
S-896 80 Husum
Sweden

Phone
+46 (0) 663 18000

E-mail
maria.alsen@metsagroup.com

More information about Paper Profile can be found on www.paperprofile.com
SUPPLEMENTARY SHEETS TO PAPER PROFILE

MetsäBoard Natural FBB 175–325 g/m²

Metsä Board Husum mill, Sweden

MetsäBoard Natural FBB is an uncoated paperboard suitable for offset and flexo printing. It comes without coating when a more natural look is preferred and is hard-sized to prevent edge penetration by moisture. Lightweight and sturdy, MetsäBoard Natural FBB provides more yield per tonne, making it a cost-effective option with a lower environmental impact.

1. MILL INFORMATION

Metsä Board Husum produces market pulp, uncoated and coated paperboard and uncoated linerboard. The main markets are Europe and North America. Ships are used to transport the products to the terminals in Germany, UK and North America. The products are then forwarded by rail or road, depending on the distance and location of the customer. The products are transported to the Nordic markets mostly by truck, but train is also used.

Metsä Board Husum is located in the village of Husum, on the east coast of Sweden, about 600 km north of Stockholm. It is an integrated mill with a production capacity of 650,000 tonnes of paperboard and linerboard and 730,000 tonnes of chemical pulp. Metsä Board only uses Metsä Group’s own pulps in its production. The mill is surrounded by forests and agricultural land. The treated effluent is directed after careful purification to the Baltic Sea.

More information at our website

2. MAIN ENVIRONMENTAL TARGETS AND PERFORMANCE

Metsä Board’s sustainability targets are based on Metsä Board’s strategy and Metsä Group’s strategic sustainability objectives which were renewed in 2019. These new targets extending to 2030 are mirrored across the supply chain and production processes to meet the requirements of the global Sustainable Development Goals, SDGs, set by the United Nations. Mitigating climate change is in the core of Metsä Board’s sustainability efforts: the company aims to achieve fossil free mills by 2030 with zero fossil CO2 emissions.

In 2019, 83% of the energy used by our mills was fossil free and the majority of our raw materials already came from renewable sources. We also aim not to use any fossil oil-based raw materials in our production from 2030 onwards. Metsä Board’s energy efficiency changed by -0.5% from 2018 level (target minimum +10% by 2030) and the use of process water per product tonne decreased by 11% from 2018 level (target -30% by 2030).

In 2019, Metsä Board was acknowledged in the CDP’s Climate A list for its actions in climate change mitigation for the fourth time. Furthermore, we scored A- both in the CDP’s Water and Forest programmes as well as in CDP’s Supplier Engagement Rating. Metsä Board is also in the top 1% of companies assessed by EcoVadis in the manufacture of corrugated paper and paperboard industry. We achieved the highest recognition level ‘Gold’ for the third consecutive time. Read more in Metsä Board’s annual report 2019 and sustainability web-pages.

3. MANAGEMENT SYSTEMS

Metsä Board continuously develops the efficiency of its production units to improve resource efficiency and environmental performance. Metsä Board follows up its environmental impact, for example, in the form of greenhouse gas emissions, energy and water consumption as well as waste generation. One of Metsä Board’s key duties is to guarantee that all its operations are sustainable and that all its products are safe for both people and the environment.

All Metsä Board mills have ISO 22000 and in addition to that all mills producing paperboard for food end-use, Simpele, Kyro, Kemi, Äänekoski and Husum board mills, are also certified according to FSSC 22000 (Food Safety System Certification). The FSSC 22000 provides a framework for effectively managing a company’s food safety responsibilities and is recognised by the Global Food Safety Initiative (GFSI).

Metsä Board’s environmental management follows Metsä Group’s Environmental Policy and complies with ISO 14001 standard. The main principles of the Environmental Policy are environmental responsibility, sustainable forestry, and requiring responsibility in operations also from our suppliers. All production units have ISO 9001 quality, ISO 14001 environmental and ISO 50001 energy management systems as well as the ISO 45001 / OHSAS 18001 Occupational Health and Safety management system.

Metsä Board mills are certified according to PEFC™ and FSC® CoC Forest certification systems which enable full traceability in the wood supply chain and the wood origins of its products are externally verified. Raw materials and services are purchased from suppliers signing and following Metsä Group’s Supplier Code of Conduct.

Date of issue 11.5.2020
4. ORIGIN OF WOOD
Regardless of the country of origin or whether it comes from certified or controlled forests, Metsä Group always knows the origin of the wood it uses, ensures its legality and takes measures to prevent the risk of unacceptable practices in the supply chain.

Metsä Group uses wood that comes from sustainably managed forests. Metsä Group’s wood procurement is handled by the company’s principal owner, Metsäliitto Cooperative. Metsäliitto Cooperative holds PEFC™ Chain of Custody, FSC® Chain of Custody and controlled wood certificates. Metsäliitto Cooperative’s wood origin tracing system is included in its certified ISO 9001 and 14001 quality and environmental management systems.

Metsä Board uses only 100% traceable wood for its products. In 2019, the share of certified wood Metsä Board used was 76% whilst worldwide only some 10% of all the forests are certified.

The product specific certification share is shown on delivery documents of each product. For information on labelled products please contact Metsä Board’s local sales office.

Wood information of the product (gathered from 1.1.2019 to 31.12.2019):

<table>
<thead>
<tr>
<th>COUNTRY OF WOOD ORIGIN</th>
<th>SHARE OF TOTAL WOOD SUPPLY</th>
<th>NAME OF SPECIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>33%</td>
<td>birch (Betula spp.), aspen (Populus tremula), spruce (Picea abies), pine (Pinus spp.)</td>
</tr>
<tr>
<td>Finland</td>
<td>31%</td>
<td>birch (Betula spp.), aspen (Populus tremula), spruce (Picea abies), pine (Pinus spp.)</td>
</tr>
<tr>
<td>Russia</td>
<td>11%</td>
<td>birch (Betula spp.), aspen (Populus tremula), spruce (Picea abies), pine (Pinus spp.)</td>
</tr>
<tr>
<td>Estonia</td>
<td>11%</td>
<td>birch (Betula spp.), aspen (Populus tremula), spruce (Picea abies), pine (Pinus spp.)</td>
</tr>
<tr>
<td>Latvia</td>
<td>11%</td>
<td>birch (Betula spp.), aspen (Populus tremula), spruce (Picea abies), pine (Pinus spp.)</td>
</tr>
<tr>
<td>Lithuania</td>
<td>2%</td>
<td>birch (Betula spp.), aspen (Populus tremula), spruce (Picea abies), pine (Pinus spp.)</td>
</tr>
<tr>
<td>Poland</td>
<td>&lt;1%</td>
<td>spruce (Picea abies), pine (Pinus spp.)</td>
</tr>
<tr>
<td>Germany</td>
<td>&lt;1%</td>
<td>spruce (Picea abies), pine (Pinus spp.)</td>
</tr>
</tbody>
</table>

This product fulfils the requirements of EU Timber Regulation and US Lacey Act. More about Metsä Group’s wood procurement: [www.metsagroup.com](http://www.metsagroup.com)

5. HANDLING AFTER USE

PRODUCT
Recommended handling after use is recycling but it can also be used for incineration. Preferred handling depends on local conditions and regulations.

PRODUCT PACKAGING MATERIAL
The packaging material can be recycled or incinerated to produce energy. Preferred handling depends on local conditions and regulations.

6. ENVIRONMENTAL PARAMETERS

COD = CHEMICAL OXYGEN DEMAND
The amount of oxygen consumed in complete chemical oxidation of matter present in waste water.

AOX = ADSORBABLE ORGANIC HALOGEN COMPOUNDS
Reported as the total amount of chlorine bound to organic compounds in waste water.

N\text{TOT} = TOTAL AMOUNT OF ORGANIC AND INORGANIC NITROGEN
P\text{TOT} = TOTAL AMOUNT OF ORGANIC AND INORGANIC PHOSPHORUS

SO\text{2} = SULPHUR DIOXIDE
Total sulphur emissions to air from burning sulphur-containing fuels and from chemical pulp processing, expressed as SO\text{2}.

NO\text{X} = NITROGEN OXIDES (NO AND NO\text{2})
Nitrogen oxides emissions to air from combustion processes, expressed as NO\text{2}.

CO\text{2} = FOSSIL CARBON DIOXIDE
In the context of papermaking, fossil carbon dioxide is generated from the combustion of fossil fuels during the production of pulp and paper.

BIOGENIC CARBON
The amount of biomass based carbon stored in the product, expressed as CO\text{2}.

SOLID WASTE = NON-LIQUID WASTE LANDFILLED ON SITE AND/OR ELSEWHERE
Organic and inorganic waste materials are defined, calculated and declared as completely dry matter.

PURCHASED ELECTRICITY CONSUMPTION
Amount of purchased electricity per produced tonne of product. Note: Emissions of SO\text{2}, NO\text{2} and CO\text{2} resulting from external electricity suppliers are not included.

Date of issue 11.5.2020
Metsä is a forerunner in sustainable bioeconomy utilising renewable wood from sustainably managed northern forests. Metsä focuses on wood supply and forest services, wood products, pulp, fresh fibre paperboards and tissue and greaseproof papers.

In 2019, Metsä Group’s sales totalled EUR 5.4 billion, and it employs approximately 9,600 people. Metsäliitto Cooperative is the parent company of Metsä Group and is owned by approximately 103,000 Finnish forest owners.

Metsä Board is a leading European producer of premium fresh fibre paperboards including folding boxboards, food service boards and white kraftliners. Our lightweight paperboards are developed to provide better, safer and more sustainable solutions for consumer goods as well as retail-ready and food service applications. We work together with our customers on a global scale to innovate solutions for better consumer experiences with less environmental impact. The pure fresh fibres Metsä Board uses are a renewable resource, traceable to origin in sustainably managed northern forests.

The global sales network of Metsä Board supports customers worldwide, including brand owners, retailers, converters and merchants. In 2019, the company’s sales totalled EUR 1.9 billion, and it had approximately 2,400 employees. Metsä Board, part of Metsä Group, is listed on the Nasdaq Helsinki.