MILL LOCATION
Arneburg, Saxony-Anhalt, Germany

PRODUCT PROFILE
NBSK Pulp: 680,000 ADMT/yr

PROCESS DESCRIPTION
Mercer Stendal produces high-quality, bleached softwood kraft pulp using softwood chips purchased from regional sawmills and roundwood from northern European countries. The bleach plant process is enhanced Elemental Chlorine Free (ECF) and Total Chlorine Free (TCF).

ECF BLEACHING SEQUENCE
(O/O)-Q-OP-D-PO

TCF BLEACHING SEQUENCE
(O/O)-Q-OP-Q-PO

SOFTWOOD SPECIES

- **Spruce** - Picea abies
- **Pine** - Pinus sylvestris
- **Larch** - Larix decidua
- **Douglas Fir -** Pseudotsuga menziesii

COMPLIANCE WITH INTERNATIONAL STANDARDS

Pulps are fully compliant with the requirements of the US Lacey Act, EU Timber Regulations and REACH.

MERCER stendal

CERTIFICATIONS

Fibre	Certification No.	Expiration Date
PEFC Chain of Custody	DC-COC-000827	30. June, 2024
FSC® Chain of Custody	TUVDC-COC-100827	30. June, 2024
FSC® Controlled Wood	TUVDC-CW-100827	30. June, 2024
Quality and Environmental		
ISO 9001: 2015	FS518413(8349D)	30. November, 2024
ISO 14001: 2015	EMS518414(8349U)	30. November, 2024
ISO 50001:2018	ENMS909685	15. January, 2024
Food Grade	**Standard**	
ISEGA	49257 U 19	20. April, 2025
US-FDA	21 CFR 176.170 and 176.180	20. April, 2025
Composting		
ISEGA	EN 13432	22. March, 2024

MODERN PULP PRODUCTION

The most efficient use of the renewable material

Mercer Stendal GmbH processes approximately 3.5 million cubic meters of wood on an annual basis. Mercer's vision is to transform biomass into bioproducts for a more sustainable world. In addition to pulp production, the mill also produces bioenergy, biochemicals, and other bio-based products from wood. The goal is to achieve as much value from the biomass wood as possible.

Modern pulp production in a biorefinery

Mercer Stendal uses the renewable raw material wood as efficiently and sustainably as possible, implementing the principle of biorefineries: break wood down to its basic components and use them as extensively as technologically possible. In addition to cellulose fibers, the mill extracts various biochemicals from the wood including turpentine and tall oil. These bio-based products are used to replace fossil-based raw materials.

The mill operates Germany's largest biomass power plant and generates energy from the remaining organic components only after the material utilization of the biomass.

Pulp is a raw material for the paper industry and is used primarily in the production of printing, hygiene, and specialty papers. Another important use is as fresh fibre in the recycling of waste paper. In this way the mill plays an important role in contributing to maintaining paper recycling.

For more information, visit www.mercerint.com

Environmental Product Declaration 2022

2021 ENVIRONMENTAL PARAMETERS

Fossil Fuel Greenhouse Gas Emissions

144 kg CO2-e/ADMT - Scope 1 GHG Emissions

Renewable Electricity

100% of the electricity required for pulp mill operations is biomass energy generated from the mill's biofuel.

Energy Efficiency

32.08 GJ/ADMT of which 93% is from renewable biomass energy.

Water Emissions

BOD^5 (kg/ADMT)	0.19
AOX (kg/ADMT)	0.03
Nitrogen (kg/ADMT)	0.10
Phosphorous (kg/ADMT)	0.01
Water Usage (m^3/ADMT)	36.0
Total Suspended Solids (kg/ADMT)	0.13

Air Emissions

SO2 (kg/ADMT)	0.01
Particulate Matter (kg/ADMT)	0.14
NOX (kg/ADMT)	1.54

Waste Management

Solid waste land filled (kg/ADMT)	13.5

Responsible Fibre Sourcing

All of Mercer Stendal's fiber suppliers must comply with the Mercer International Wood and Fiber Procurement Policy that ensures all of Mercer sources fiber from sustainably managed forests.

Mercer Holz, Mercer Germany's wood procurement organization, harvests and transports this renewable resource as environmentally-friendly and cost-efficiently as possible. All of the wood that Mercer Holz purchases comes from controlled sources. This ensures that our resource

- is not illegally harvested,
- does not originate from areas with violation of traditional and civil rights,
- does not originate from forests in which high conservation values are threatened by management activities,
- does not originate from forests being converted from natural and semi-natural forest to plantations or non-forest use, and
- does not originate from forests in which genetically modified tress are planted.

Mercer Holz has invested in a new rail fleet that allows the transport of wood more efficiently and in a more environmentally-friendly manner.

Leading Safety Culture

The protection of human health and personal safety rank at the highest level of importance to Mercer's operations.

Mercer Stendal operates in a diligent and responsible manner to ensure ZERO HARM to their people through their Road to Zero safety program. Mercer Stendal is dedicated to continuously improving their processes, being individually accountable, and promoting comprehensive safety awareness.

Mill Safety Performance (TRIR):

(Incidents /200,000 hrs)

2020 1.95
2021: 0.84
2022: 1.37

Mercer's Fiber Center - Quality Assurance

Refining is the key process required in paper making to alter fiber characteristics. To support customers, mill projects, and applied research, Mercer operates a state-of-the-art laboratory refiner simulating the industrial refining process. This device is integrated into a fully equipped wet and dry laboratory.

Science Based Target initiative

Mercer International has responded to SBTi's urgent call for corporate climate action by committing to align with 1.5°C and net-zero through the Business Ambition for 1.5°C campaign.

Environmental Product Declaration 2023

Environmental Performance

Mercer consistently monitors for compliance with strict requirements. Compared to other modern kraft pulp plants, Mercer Stendal excels in terms of environmental characteristics and redefines the state of technology in many environmental parameters.

Large amounts of water are taken from the Elbe River for production purposes and returned to the river following a complicated process of mechanical and biological cleaning. The Elbe is part of the "Middle Elbe Biosphere Reserve". Mercer Stendal is further surrounded by nature reserves and conservation areas and located at the edge of a "NATURA 2000" area.

One of the most important environmental parameters in this field is water consumption. Mercer Stendal has been able to reduce water consumption intensity over the last few years and has invested in new modern plant technology to increase the environmental performance, decrease GHG emissions, and improve the effluent quality.

Food Grade Certification

Both of Mercer Stendal's softwood pulps are manufactured and rigorously tested by independent labs (ISEGA) to ensure they meet Food Grade Standards, including European Standards EC No. 1935/2004 and BfR-Recommendation XXXVI. Paper and Board for food contact and XXXVI/1. Cooking Papers, Hot Filter Papers and Filter Layers.

Mitigating Climate Change

Mercer is committed to reducing its GHG intensity through continuous investment in technologies for improving energy efficiency, increasing the usage of renewable fuels and through full-fiber utilization. Mercer Stendal has made significant capital investments in renewable electricity generation. This mill is completely self-sufficient in terms of electricity. Over 50% of this renewable energy is fed into the public power grid every year. In 2022, Mercer Stendal generated 890 GWh of renewable energy. The amount produced could supply more than 283,000 private households and replaces electricity volumes that are generated on the basis of fossil fuels.

SCIENCE BASED TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

BSR

FSC
www.fsc.org
FSC® C019862
The mark of responsible forestry

PEFC
PEFC/04-31-0411
Promoting Sustainable Forest Management
www.pefc.org

BUSINESS AMBITION FOR 1.5°C

For more information, visit www.mercerint.com