



Environmental Product Declaration Type III ITB No. 472/2023

Issuance date: 30.06.2023 Validity date: 30.06.2028



NJORD ARMCHAIR AND TABLE

BASIC INFORMATION

This declaration is the Type III Environmental Product Declaration (EPD) based on EN 15804 and verified according to ISO 14025 by an external auditor. It contains the information on the impacts of the declared construction materials on the environment. Their aspects were verified by the independent body according to ISO 14025. Basically, a comparison or evaluation of EPD data is possible only if all the compared data were created according to EN 15804+A2.

ITB is the verified member of The European Platform for EPD program operators and LCA practitioner www.eco-platform.org

Life cycle analysis (LCA):

A1-A3, C1-C4 and D modules, in accordance with EN 15804+A2

The year of preparing the EPD:

2023

Product standard:

EN 16139, EN 15372

Service Life:

 ${\bf 5}$ years for standard product with possibility of 10 years

PCR:

ITB-PCR A (PCR based on EN 15804)

Declared unit:

1 piece

Reasons for performing LCA:

B2E

Representativeness:

Polish product

Owner of the EPD:

Nowy Styl sp. z o.o.

Address: Pużaka 49, 38-400 Krosno, Poland

Website: https://pl.nowystyl.com/pl/

Contact: info@nowystyl.com Tel.: +48 13 43 76 100,

+48 13 43 62 732

EPD Program Operator:

Instytut Techniki Budowlanej (ITB)

Address: Filtrowa 1, 00-611 Warsaw, Poland

Website: www.itb.pl Contact: Michał Piasecki m.piasecki@itb.pl energia@itb.pl

1

01/MANUFACTURER



OUR COMPANY

Nowy Styl has been helping companies around the world to arrange office and public spaces for 30 years. First we define their needs, and then we choose and provide products and solutions that will make the work healthier, more efficient and comfortable. We do it with genuine passion and satisfaction, what has led us to become one of the leaders in the furniture industry in Europe.

We present our solutions at the Office Inspiration Centre and 29 showrooms in London, Paris, Düsseldorf, Munich, Prague, Bratislava, Dubai and many more. We provide furniture for new office buildings, airports, conference centres, cinemas, stadiums, music, sports and multi-functional facilities.

Our list of references includes multinational corporations such as Siemens, Toyota, DS Smith, Honeywell, Deloitte and ABB, cultural institutions such as Polish National Radio Symphony Orchestra in Katowice and the Opera in Munich, as well as the stadiums in Poland and France in which European Football Championships were held in 2012 and 2016, as well as six stadiums for the Football World Cup in Qatar (2022).

We cooperate with designers from all over the world and our products are appreciated in competitions. We have received, i. a., the Red Dot Design Award, the German Design Award, the Iconic Awards, the Design Award.

The Nowy Styl portfolio includes the following brands: Nowy Styl, Kusch+Co, SOHOS by Nowy Styl, Sitag by Nowy Styl and Forum by Nowy Styl.

We make our products in manufacturing plants equipped with cutting-edge technologies, located in Poland, Germany, France and Switzerland. This assessment applies to those located in Poland, in the region of Podkarpacie (4 plants) - 3 in Jasło and 1 in Rzepedź, with a floor area of nearly 100,000 m2, including a fully automated office furniture factory opened in 2014. The company also owns Research and Development Centre located in Jasło where innovative production technologies and product solutions are constantly developed.

O1/MANUFACTURER

ENVIRONMENTAL STANDARDS

We are aware that our operations have an impact on the natural environment, and we strive to reduce or neutralise it with future generations in mind.

Nowy Styl has implemented management systems confirmed by the following certificates: quality management system EN ISO 9001:2015, environmental management system EN ISO 14001:2015 and occupational health and safety EN ISO 45001. As an extension of the existing environmental management system in Nowy Styl sp. z o.o., we have implemented an ecodesign management system based on the ISO 14006 standard (Environmental Management Systems - Guidelines for incorporating ecodesign).







Ecodesign management is a methodical approach, taking into account environmental aspects during product design and development in order to reduce the negative environmental impact throughout the product's life cycle according to ISO 14040 standard

(including components and raw materials).

CARBON FOOTPRINT REDUCTION

Nowy Styl has implemented a CO_2 management system for the Organization (CO_2 footprint) in accordance with the requirements stated in ISO 14064-1 and the GHG Protocol and confirmed by the CO_2 Performance Ladder certificate. Many initiatives completed in 2019-2022 produced impressive results - in 2022 our emissions in Scope 1 and 2 were lower by 43% than in 2018. One of key measures we undertake is providing renewable energy for our production processes: in 2020 it was 12,76% in total energy used for manufacturing and offices, in 2021 - 32,51% and in 2022 - 28,71% (it refers to additional purchases to improve the available energy mix).

ECOVADIS PLATINUM MEDAL

EcoVadis is an independent, holistic CSR assessment rating several dozen criteria in four thematic categories: human and labour rights, environment, ethics and sustainable procurement. Nowy Styl undergoes these audits for many years now. In 2022 and 2023 our company achieved the highest possible rating and was awarded the EcoVadis Platinum Medal, what places us among the top 1% of the best-rated companies.

SUSTAINABLE PROCUREMENT

Risk analysis and supplier assessment is the responsibility of Supplier Quality Department (within Global Procurement Department) in Poland. The purpose of their analysis is to constantly monitor and supervise our current and future suppliers with regards to potential risks.

Supplier evaluation is focused among others on the following areas: Employees human rights, Fair business practices, Environment, OHS, Purchasing, Production Process, Maintenance, Continuous Improvement and other (in accordance to FEMB Level guidance manual). Suppliers from high-risk countries shall obligatory provide 3rd party audit report. Since 2022 we prepare to expand our carbon footprint analysis for Scope 3. Our suppliers are asked to provide this information in the self-assessment.

02/PRODUCT DESCRIPTION

NJORD ARMCHAIR



NJORD TABLE



NJORD armchair and table

The material wood is worked into an unusually slender frame. The seat shell, entirely made of anthracite polyester felt, seduces with its organic design and the soft touch of its materiality.

PRODUCT DESCRIPTION

Frame armchairs NJORD Frame versions:

4L LGW- solid wood four legs Glides: plastic, for hard or soft surfaces Shell: felt with upholstered seat pad

CERTIFICATES

Durability certificate

APPLICATIONS

Conference rooms, meeting rooms, public areas and as visitor armchair in workplaces

PRODUCT DESCRIPTION

NJORD Table

Tabletop: plywood covered with laminate or linoleum

Base versions:

LWM - solid wood four legs

Glides: plastic, for hard or soft surfaces

CERTIFICATES

Durability certificate

APPLICATIONS

Conference rooms, meeting rooms, public areas

All specific product technical data is available at manufacturer website (https://www.nowystyl.com/en/kusch-co-office).

03/LIFE CYCLE ASSESSMENT(LCA)

GENERAL RULES APPLIED

ALLOCATION

The allocation rules used for this EPD are based on general ITB-PCR A v. 1.6. Production line process carried out in four factories of Nowy Styl sp. z o.o. located in Krosno and Rzepedź (Poland). Allocation was done on product mass basis. All impacts from raw materials extraction are allocated in A1 module of the LCA. 100% of impacts from the line production of Nowy Styl sp. z o.o. were inventoried. Utilization of packaging material was taken into consideration. Module A2 includes transport of raw materials such as wood-faced boards, wood, polymer components, steel elements, papers, additives, ancillary materials and packaging materials from their suppliers to Nowy Styl sp. z o.o. in Jasło and in Rzepedź. Municipal wastes of factory were allocated to module A3. Energy supply was inventoried for whole factory and was allocated to the production. Emissions in the factory are measured and were allocated to module A3.

SYSTEM LIMITS

The life cycle analysis of the declared products covers "Product Stage", A1-A3, C1, C2, C3, C4 and D modules (Cradle-to-Gate with options) accordance with ISO 14040 and PCR A v.1.6. The details of systems limits are provided in product technical report. Energy and water consumption, emissions as well as information on generated wastes were inventoried and were included in the calculations. It can be assumed that the total sum of omitted processes does not exceed 5% of all impact categories. In accordance with ITB PCR A v. 1.6., machines and facilities (capital goods) required for the production as well as transportation of employees were not included in LCA.

A1 AND A2 MODULES: RAW MATERIALS SUPPLY AND TRANSPORT

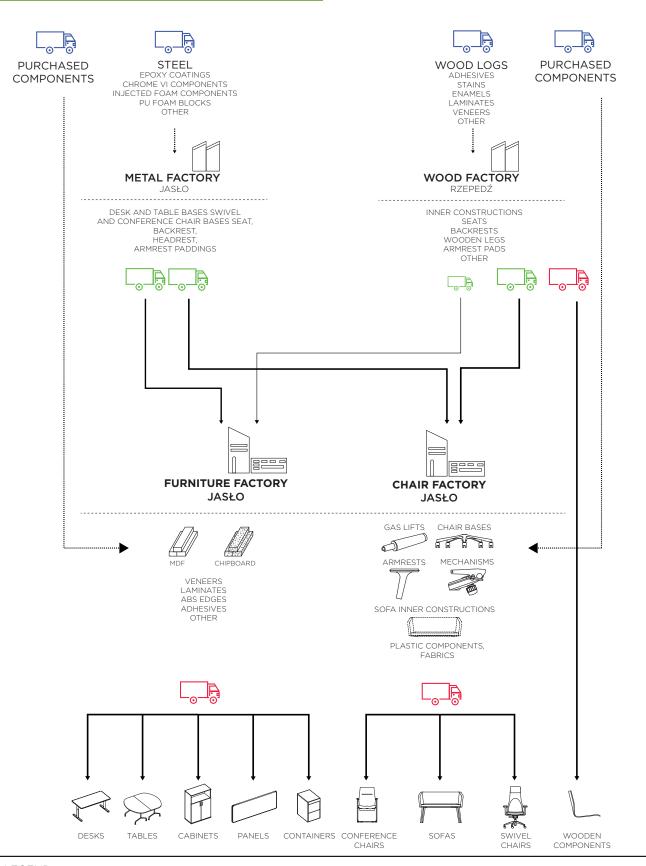
Wood-based products, wood, polymer components, steel elements, papers, additives, ancillary materials and packaging materials come from Polish and foreign suppliers. Means of transport include lorries. European standards for average combustion were used for calculations.

A3 PRODUCTION

As shown in the scheme of manufacturing on page 6. Nowy Styl sp. z o.o. manufactures products in four factories in Poland. Two of them process purchased materials such as metal and wood into components. Then, the furniture and chair factories use those components, as well as purchased components to assemble products, which are then ready for distribution. Some of the components made in the wood factory are also sold as finished products.

03/LIFE CYCLE ASSESSMENT(LCA)

A3 PRODUCTION



LEGEND:







03/LIFE CYCLE ASSESSMENT(LCA)

GENERAL RULES APPLIED

END OF LIFE SCENARIOS

It is assumed that at the end-of-life, the declared product is dismantled manually or with the use of electrical tools. The resulting waste is transported to waste processing plant distant by 75 km on 24t lorry (Euro 5) with 90% capacity utilization (module C2). Selectively recovered materials undergo recycling, energy recovery or land-filling according to national treatment practice of the industrial waste and recommendations of Nowy Styl sp. z o.o. Environmental burdens declared in module C4 are associated with waste-specific emissions to air and groundwater. A potential credit resulting from the recycling and energy recovery are presented in module D.

Table 1 End of life scenario for specific product.

| MATERIAL | MATERIAL RECOVERY | ENERGY RECOVERY | RECYCLING | LANDFILLING |
|--|----------------------|--------------------|-----------|-------------|
| POLYMERS | 100% | 10% | 85% | 5% |
| ALUMINIUM | 100% | 0% | 98% | 2% |
| STEEL | 100% | 0% | 98% | 2% |
| WOOD AND WOODEN-BASED COMPONENTS | OODEN-BASED 100% | | 90% | 2% |
| CARTONBOARD | 100% | 20% | 80% | 0% |

DATA COLLECTION PERIOD

Primary data provided by Nowy Styl sp. z o.o. covers a period of 01.01.2021 – 31.12.2021 (1 year). The life cycle assessments were prepared for Poland and Europe as reference area.

DATA QUALITY

The data selected for LCA analysis originate from ITB-LCI questionnaires completed by Nowy Styl Sp. z o.o. using the inventory data, ITB and Ecoinvent databases. No specific data collected is older than five years and no generic datasets used are older than ten years. The representativeness, completeness, reliability, and consistency are judged as good.

ASSUMPTIONS AND ESTIMATES

The impacts of the representative the specific product were aggregated using weighted average. Impacts were inventoried and calculated for all products.

CALCULATION RULES

LCA was done in accordance with ITB PCR A using ITB LCA-tool.

DATA BASES

The data for the processes come from the following databases: Ecoinvent v.3.9, specific EPDs, ITB-Data. specific data quality analysis was a part of the external audit.

RESULTS

DECLARED UNIT

The declaration refers to declared unit (DU): 1 piece NJORD system produced by Nowy Styl sp. z o.o.

Table 2. System boundaries for the environmental characteristic of the NJORD armchair and tables produced by Nowy Styl sp. z o.o.

Table 2 System boundaries in a product environmental assessment

| PRO | DUCT ST | AGE | | RUCTION OCESS | | USE STAGE END OF LIFE | | | | | | | BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARY | | | |
|---------------------|-----------|---------------|--------------------------------|-----------------------------------|-----|-----------------------|--------|-------------|---------------|------------------------|-----------------------|---------------------------|---|------------------|----------|------------------------------------|
| Raw material supply | Transport | Manufacturing | Transport to construction site | Construction-installation process | Use | Maintenance | Repair | Replacement | Refurbishment | Operational energy use | Operational water use | Deconstruction demolition | Transport | Waste processing | Disposal | Reuse-recovery-recycling potential |
| A1 | A2 | A3 | A4 | A5 | B1 | B2 | В3 | В4 | B5 | В6 | В7 | C1 | C2 | C3 | C4 | D |
| MD | MD | MD | MNA | MNA | MNA | MNA | MNA | MNA | MNA | MNA | MNA | MD | MD | MD | MD | MD |

Environmental assessment information

(MNA - Module not assessed, MD - Module Declared, INA - Indicator Not Assessed)

03/LIFE CYCLE ASSESSMENT(LCA) Environmental Product Declaration Type III ITB No. 472/2023

RESULTS

Table 3 Life cycle assessment (LCA) results for specific product

| | NJORD ARMCHAIR KO | | | | | | | | | |
|---|------------------------|-----------|----------|----------|-----------|----------|----------|----------|----------|-----------|
| Environmental impacts : (DU) 1 piece (weight : 24.67 kg*) | | | | | | | | | | |
| IMPACT CATEGORIES | UNIT | A1 | A2 | A3 | A1-A3 | C1 | C2 | C3 | C4 | D |
| Global Warming Potential | eq. kg CO ₂ | 3.36E+00 | 4.46E-02 | 4.50E+01 | 4.84E+01 | 4.97E-02 | 6.71E-04 | 9.32E-01 | 3.86E-03 | -7.09E+00 |
| Greenhouse gas potential - fossil | eq. kg CO ₂ | 1.01E+01 | 4.43E-02 | 4.22E+01 | 5.23E+01 | 4.88E-02 | 6.69E-04 | 7.63E-01 | 3.85E-03 | -7.57E+00 |
| Greenhouse gas potential - biogenic | eq. kg CO ₂ | -6.70E+00 | 2.21E-04 | 2.67E+00 | -4.03E+00 | 8.80E-04 | 2.29E-06 | 1.70E-01 | 1.25E-05 | 5.47E-01 |
| Global warming potential - land use and land use change | eq. kg CO ₂ | 1.28E-02 | 2.59E-05 | 1.78E-01 | 1.91E-01 | 1.15E-05 | 2.62E-07 | 6.18E-05 | 1.77E-06 | -6.76E-02 |
| Stratospheric ozone depletion potential | eq. kg CFC 11 | 7.22E-07 | 9.71E-09 | 5.62E-06 | 6.35E-06 | 8.75E-10 | 1.55E-10 | 1.24E-07 | 1.03E-09 | -5.28E-07 |
| Soil and water acidification potential | eq. mol H+ | 4.35E-02 | 1.73E-04 | 9.07E-01 | 9.50E-01 | 4.84E-04 | 2.71E-06 | 2.98E-03 | 2.29E-05 | -1.50E-02 |
| Eutrophication potential - freshwater | eq. kg P | 3.63E-03 | 4.23E-06 | 4.63E-02 | 5.00E-02 | 8.29E-05 | 4.49E-08 | 2.67E-05 | 2.10E-07 | -6.12E-03 |
| Eutrophication potential - seawater | eq. kg N | 1.08E-02 | 4.80E-05 | 2.29E-01 | 2.40E-01 | 6.88E-05 | 8.19E-07 | 1.17E-03 | 1.28E-05 | -3.63E-03 |
| Eutrophication potential - terrestrial | eq. mol N | 9.71E-02 | 5.22E-04 | 3.50E+00 | 3.60E+00 | 5.90E-04 | 8.93E-06 | 1.27E-02 | 8.95E-05 | -3.87E-02 |
| Potential for photochemical ozone synthesis | eq. kg NMVOC | 3.50E-02 | 1.63E-04 | 6.35E-01 | 6.70E-01 | 1.66E-04 | 2.74E-06 | 3.58E-03 | 2.62E-05 | -1.09E-02 |
| Potential for depletion of abiotic resources - non- fossil resources | eq. kg Sb | 9.89E-04 | 2.72E-07 | 9.94E-05 | 1.09E-03 | 6.59E-08 | 2.37E-09 | 3.34E-07 | 5.42E-09 | 2.03E-04 |
| Abiotic depletion potential - fossil fuels | MJ | 4.67E+02 | 6.48E-01 | 5.89E+02 | 1.06E+03 | 7.45E-01 | 9.92E-03 | 7.83E+00 | 6.88E-02 | -1.36E+02 |
| Water deprivation potential | eq. m3 | 3.16E+01 | 3.95E-03 | 2.36E+01 | 5.52E+01 | 1.51E-02 | 4.59E-05 | 3.69E-02 | 2.42E-04 | -1.21E+01 |

Table 4 Life cycle assessment (LCA) results for specific product

| | | Environmen | tal impacts : (D | U) 1 piece (wei | ght : 24.67 kg*) | | | | | |
|---|------|------------|------------------|-----------------|------------------|----------|----------|----------|----------|-----------|
| ASPECTS | UNIT | A1 | A2 | A3 | A1-A3 | C1 | C2 | С3 | C4 | D |
| Consumption of renewable primary energy - excluding renewable primary energy sources used as raw materials | MJ | INA | INA | INA | INA | INA | INA | INA | INA | INA |
| Consumption of renewable primary energy resources used as raw materials | MJ | INA | INA | INA | INA | INA | INA | INA | INA | INA |
| "Total consumption of renewable primary energy resources (primary energy AND primary energy resources used as raw materials)" | MJ | 3.65E+02 | 1.37E-02 | 1.17E+03 | 1.54E+03 | 5.41E-02 | 1.42E-04 | 4.70E-02 | 8.98E-04 | -6.18E+01 |
| "Consumption of non-renewable primary energy, excluding non-renewable primary energy resources used as raw materials" | MJ | INA | INA | INA | INA | INA | INA | INA | INA | INA |
| Consumption of non-renewable primary energy resources used as raw materials | MJ | INA | INA | INA | INA | INA | INA | INA | INA | INA |
| "Total consumption of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials)" | MJ | 3.40E+02 | 6.48E-01 | 6.13E+02 | 9.54E+02 | 7.89E-01 | 9.92E-03 | 8.47E+00 | 6.88E-02 | -1.51E+02 |
| Consumption of secondary materials | kg | 4.89E-02 | 3.33E-04 | 2.26E-01 | 2.76E-01 | 0.00E+00 | 3.33E-06 | 9.03E-05 | 1.47E-05 | 4.46E-02 |
| Consumption of renewable secondary fuels | MJ | 5.81E+00 | 3.97E-06 | 1.11E-03 | 5.81E+00 | 0.00E+00 | 3.67E-08 | 1.57E-06 | 3.53E-04 | 1.10E+01 |
| Consumption of non-renewable secondary fuels | MJ | 3.40E+01 | 0.00E+00 | 0.00E+00 | 3.40E+01 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.11E-01 |
| Net consumption of freshwater resources | m3 | 2.90E-01 | 1.05E-04 | 6.06E-01 | 8.96E-01 | 2.42E-04 | 1.25E-06 | 4.11E-04 | 7.85E-05 | -3.72E-02 |
| | | Environmen | tal impacts : (D | U) 1 piece (wei | ght : 24.67 kg*) | 1 | | | | |
| WASTES | UNIT | A1 | A2 | A3 | A1-A3 | C1 | C2 | С3 | C4 | D |
| Hazardous waste, neutralised | kg | 3.98E+00 | 1.01E-03 | 1.02E+00 | 5.00E+00 | 1.54E-07 | 1.11E-05 | 1.09E-02 | 6.90E-05 | -7.12E-02 |
| Non-hazardous waste, neutralised | kg | 4.59E+00 | 1.85E-02 | 1.86E+01 | 2.32E+01 | 4.40E-03 | 1.98E-04 | 3.12E-01 | 1.13E-02 | -2.91E+00 |
| Radioactive waste | kg | 8.39E-03 | 4.36E-06 | 5.55E-04 | 8.95E-03 | 6.38E-07 | 7.41E-10 | 5.48E-05 | 4.60E-07 | -1.04E-04 |
| Components for re-use | kg | 4.69E-02 | 0.00E+00 | 0.00E+00 | 4.69E-02 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Materials for recycling | kg | 2.00E-01 | 2.57E-06 | 8.94E+00 | 9.14E+00 | 0.00E+00 | 3.07E-08 | 2.51E-03 | 1.30E-07 | 1.67E-01 |
| Materials for energy recovery | kg | 1.17E-02 | 1.99E-08 | 2.86E+00 | 2.87E+00 | 0.00E+00 | 2.48E-10 | 4.92E-09 | 1.59E-09 | -5.62E-07 |
| Energy exported | MJ | 2.05E+01 | 8.96E-04 | 1.13E+00 | 2.16E+01 | 0.00E+00 | 0.00E+00 | 9.55E-01 | 4.95E-05 | 9.42E-02 |

*Product weight includes: material, packaging waste and all packaging materials

03/LIFE CYCLE ASSESSMENT(LCA) Environmental Product Declaration Type III ITB No. 472/2023

RESULTS

Table 5 Life cycle assessment (LCA) results for specific product

| NJORD TABLE KO | | | | | | | | | | |
|---|---|-----------|----------|----------|-----------|----------|----------|----------|----------|-----------|
| | Environmental impacts: (DU) 1 piece (weight: 25.54 kg*) | | | | | | | | | |
| IMPACT CATEGORIES | UNIT | A1 | A2 | A3 | A1-A3 | C1 | C2 | С3 | C4 | D |
| Global Warming Potential | eq. kg CO ₂ | 2.06E+00 | 4.64E-02 | 5.27E+01 | 5.48E+01 | 4.97E-02 | 6.98E-04 | 9.70E-01 | 4.02E-03 | -7.37E+00 |
| Greenhouse gas potential - fossil | eq. kg CO ₂ | 9.02E+00 | 4.61E-02 | 5.03E+01 | 5.94E+01 | 4.88E-02 | 6.95E-04 | 7.93E-01 | 4.00E-03 | -7.87E+00 |
| Greenhouse gas potential - biogenic | eq. kg CO ₂ | -6.91E+00 | 2.30E-04 | 2.29E+00 | -4.62E+00 | 8.80E-04 | 2.38E-06 | 1.77E-01 | 1.30E-05 | 5.68E-01 |
| Global warming potential - land use and land use change | eq. kg CO ₂ | 1.53E-02 | 2.69E-05 | 1.35E-01 | 1.50E-01 | 1.15E-05 | 2.73E-07 | 6.42E-05 | 1.84E-06 | -7.03E-02 |
| Stratospheric ozone depletion potential | eq. kg CFC 11 | 1.36E-06 | 1.01E-08 | 4.56E-06 | 5.94E-06 | 8.75E-10 | 1.61E-10 | 1.29E-07 | 1.07E-09 | -5.49E-07 |
| Soil and water acidification potential | eq. mol H+ | 6.46E-02 | 1.80E-04 | 8.48E-01 | 9.13E-01 | 4.84E-04 | 2.82E-06 | 3.10E-03 | 2.38E-05 | -1.56E-02 |
| Eutrophication potential - freshwater | eq. kg P | 4.81E-03 | 4.39E-06 | 6.51E-02 | 6.99E-02 | 8.29E-05 | 4.67E-08 | 2.78E-05 | 2.18E-07 | -6.37E-03 |
| Eutrophication potential - seawater | eq. kg N | 1.57E-02 | 4.99E-05 | 1.94E-01 | 2.10E-01 | 6.88E-05 | 8.52E-07 | 1.21E-03 | 1.34E-05 | -3.78E-03 |
| Eutrophication potential - terrestrial | eq. mol N | 1.38E-01 | 5.43E-04 | 2.79E+00 | 2.93E+00 | 5.90E-04 | 9.29E-06 | 1.32E-02 | 9.30E-05 | -4.02E-02 |
| Potential for photochemical ozone synthesis | eq. kg NMVOC | 4.70E-02 | 1.69E-04 | 5.29E-01 | 5.76E-01 | 1.66E-04 | 2.85E-06 | 3.72E-03 | 2.73E-05 | -1.13E-02 |
| Potential for depletion of abiotic resources - non- fossil resources | eq. kg Sb | 1.10E-03 | 2.83E-07 | 9.85E-05 | 1.20E-03 | 6.59E-08 | 2.46E-09 | 3.47E-07 | 5.64E-09 | 2.11E-04 |
| Abiotic depletion potential - fossil fuels | MJ | 4.01E+02 | 6.74E-01 | 7.27E+02 | 1.13E+03 | 7.45E-01 | 1.03E-02 | 8.14E+00 | 7.16E-02 | -1.41E+02 |
| Water deprivation potential | eq. m3 | 3.76E+01 | 4.11E-03 | 2.30E+01 | 6.06E+01 | 1.51E-02 | 4.77E-05 | 3.84E-02 | 2.51E-04 | -1.25E+01 |

Table 6 Life cycle assessment (LCA) results for specific product

| | | Environmen | tal impacts : (D | U) 1 piece (wei | ght : 25.54 kg*) | | | | | |
|---|------|------------|------------------|-----------------|------------------|------------|----------|----------|----------|-----------|
| ASPECTS | UNIT | A1 | A2 | A3 | A1-A3 | C 1 | C2 | С3 | C4 | D |
| Consumption of renewable primary energy - excluding renewable primary energy sources used as raw materials | MJ | INA | INA | INA | INA | INA | INA | INA | INA | INA |
| Consumption of renewable primary energy resources used as raw materials | MJ | INA | INA | INA | INA | INA | INA | INA | INA | INA |
| "Total consumption of renewable primary energy resources (primary energy AND primary energy resources used as raw materials)" | MJ | 3.75E+02 | 1.42E-02 | 8.80E+02 | 1.25E+03 | 5.41E-02 | 1.48E-04 | 4.89E-02 | 9.34E-04 | -6.43E+01 |
| "Consumption of non-renewable primary energy, excluding non-renewable primary energy resources used as raw materials" | MJ | INA | INA | INA | INA | INA | INA | INA | INA | INA |
| Consumption of non-renewable primary energy resources used as raw materials | MJ | INA | INA | INA | INA | INA | INA | INA | INA | INA |
| "Total consumption of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials)" | MJ | 2.65E+02 | 6.74E-01 | 7.63E+02 | 1.03E+03 | 7.89E-01 | 1.03E-02 | 8.81E+00 | 7.16E-02 | -1.57E+02 |
| Consumption of secondary materials | kg | 8.63E-01 | 3.46E-04 | 1.66E-01 | 1.03E+00 | 0.00E+00 | 3.46E-06 | 9.39E-05 | 1.53E-05 | 4.64E-02 |
| Consumption of renewable secondary fuels | MJ | 6.12E+00 | 4.13E-06 | 8.18E-04 | 6.12E+00 | 0.00E+00 | 3.81E-08 | 1.63E-06 | 3.67E-04 | 1.14E+01 |
| Consumption of non-renewable secondary fuels | MJ | 4.48E+01 | 0.00E+00 | 0.00E+00 | 4.48E+01 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 9.47E-01 |
| Net consumption of freshwater resources | m3 | 2.91E-01 | 1.09E-04 | 5.66E-01 | 8.57E-01 | 2.42E-04 | 1.30E-06 | 4.27E-04 | 8.17E-05 | -3.87E-02 |
| | | Environmen | tal impacts : (D | U) 1 piece (wei | ght : 25.54 kg*) | | | | | |
| WASTES | UNIT | A1 | A2 | А3 | A1-A3 | C1 | C2 | C3 | C4 | D |
| Hazardous waste, neutralised | kg | 4.64E+00 | 1.05E-03 | 8.25E-01 | 5.47E+00 | 1.54E-07 | 1.16E-05 | 1.14E-02 | 7.18E-05 | -7.41E-02 |
| Non-hazardous waste, neutralised | kg | 9.04E+00 | 1.93E-02 | 1.56E+01 | 2.47E+01 | 4.40E-03 | 2.06E-04 | 3.25E-01 | 1.18E-02 | -3.03E+00 |
| Radioactive waste | kg | 8.61E-03 | 4.54E-06 | 6.51E-04 | 9.27E-03 | 6.38E-07 | 7.70E-10 | 5.70E-05 | 4.79E-07 | -1.08E-04 |
| Components for re-use | kg | 4.74E-02 | 0.00E+00 | 0.00E+00 | 4.74E-02 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Materials for recycling | kg | 2.05E-01 | 2.67E-06 | 2.05E+01 | 2.07E+01 | 0.00E+00 | 3.20E-08 | 2.61E-03 | 1.35E-07 | 1.73E-01 |
| Materials for energy recovery | kg | 1.23E-02 | 2.07E-08 | 2.10E+00 | 2.11E+00 | 0.00E+00 | 2.58E-10 | 5.11E-09 | 1.65E-09 | -5.84E-07 |
| Energy exported | MJ | 1.99E+01 | 9.31E-04 | 8.26E-01 | 2.07E+01 | 0.00E+00 | 0.00E+00 | 9.93E-01 | 5.15E-05 | 9.79E-02 |

*Product weight includes: material, packaging waste and all packaging materials



The process of verification of this EPD was in accordance with ISO 14025 and ISO 21930. After verification, this

| | EPD is valid for a 5-year-period. EPD does not have to be recalculated after 5 years if the data have not changed significantly. |
|---|--|
| The basis for LCA analysis was EN 158 | 304 and ITB PCR A |
| Independent verification correspondi X external internal | ng to ISO 14025 (subclause 8.1.3.) |
| External verification of EPD: Ph.D. End LCA, LCI audit and input data verification Ph.D, D.Sc.Eng. Michał Piasecki. m.piasecki@itb.pl | <u>,</u> |

The declaration owner has the sole ownership, liability, and responsibility for the declaration. Declarations of construction products may not be comparable if they do not comply with EN 15804+A2. For further information about comparability, see EN 15804 and ISO 14025.

REFERENCES NORMATIVES DECLARED UNIT

- >> ITB PCR A General Product Category Rules for Construction Products
- >> ISO 14025:2006, Environmental labels and declarations - Type III environmental declarations - Principles and procedures
- >> ISO 14040:2006 Environmental management - Life cycle assessment - Principles and framework
- >> ISO 14044:2006 Environmental management - Life cycle assessment - Requirements and quidelines
- >> EN 15804:2012+A2:2019 Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products
- >> PN-EN 15942:2012 Sustainability of construction works - Environmental product declarations - Communication format business-to-business
- >> KOBiZE Wskaźniki emisyjności CO₂, SO2, NOx, CO i pyłu całkowitego dla energii elektrycznej, arudzień 2021 r.



Building Research Institute

00-611 Warszawa, ul. Filtrowa 1



Thermal Physics, Acoustics and Environment Department
02-656 Warsaw, Ksawerów 21

CERTIFICATE № 472/2023 of TYPE III ENVIRONMENTAL DECLARATION

Products

NJORD stationary chairs and tables

Manufacturer:

Nowy Styl Sp. z o.o.

ul. Pużaka 49, 38-400 Krosno, Poland

confirms the correctness of the data included in the development of Type III Environmental Declaration and accordance with the requirements of the standard

EN 15804+A2

Sustainability of construction works.

Environmental product declarations.

Core rules for the product category of construction products.

This certificate, issued on 30th June 2023 is valid for 5 years or until amendment of mentioned Environmental Declaration

Head of the Thermal Physic, Acoustics Fand, Environment Department

Williams - Hualine

Head of the Thermal Physics, Acoustics

Fand, Environment Department

And Department of the Physics

Head of the Thermal Physics, Acoustics

Fand, Environment Department

And Departm



Deputy Director
for Registarch and Innovation

MUSCOLUMN

Krzysztof Kuczyński, PhD

Warsaw, June 202