In today’s office landscape, change is constant and available space is disappearing. Calibre filing and storage maximizes your organizational options without compromising valuable workspace. 1.5” drawer-height increments mean less wasted vertical space and greater utility per case.

Recycled Content
- 12% Post-consumer recycled content
- 13% Post-industrial recycled content

Functional Unit
The functional unit is one square meter 0.15m³ of storage capacity for a period of 10 years.

As Calibre has an expected service life of over 10 years, one product is needed to fulfill the functional unit. The analysis was conducted for a Calibre storage credenza with laminate finish, chosen based on a typical rendering of the storage unit.
Environmental Product Declaration
Calibre®

This declaration is an environmental product declaration (EPD) in accordance with ISO 14025. EPDs rely on Life Cycle Assessment (LCA) to provide information on a number of environmental impacts of products over their life cycle. Exclusions: EPDs do not indicate that any environmental or social performance benchmarks are met, and there may be impacts that they do not encompass.

LCAs do not typically address the site-specific environmental impacts of raw material extraction, nor are they meant to assess human health toxicity. EPDs can complement but cannot replace tools and certifications that are designed to address these impacts and/or set performance thresholds – e.g. Type 1 certifications, health assessments and declarations, environmental impact assessments, etc.

Accuracy of Results: EPDs regularly rely on estimations of impacts, and the level of accuracy in estimation of effect differs for any particular product line and reported impact.

Comparability: EPDs are not comparative assertions and are either not comparable or have limited comparability when they cover different life cycle stages, are based on different product category rules or are missing relevant environmental impacts. EPDs from different programs may not be comparable.

Program Operator
NSF Certification, LLC.

Declaration Holder
Knoll

Declaration Number
EPD10332

Declared Product
Calibre® Storage

Reference PCR
NSF International-BiFMA PCR for Storage: UNCPC 3812

Date of Issue
December 13, 2017

Period of Validity
5 Years (Expiration: December 13, 2022)

Contents of the Declaration
Product definition and information about building physics
Information about basic material and the material’s origin
Description of the products’ manufacture
Indication of product processing
Information about the in-use conditions
Life cycle assessment results
Testing results and verifications

The PCR review was conducted by
PCR Review Panel
Chair: Thomas P. Gloria
ncss@nsf.org

This declaration was independently verified in accordance with ISO14025 by NSF Certification, LLC

This life cycle assessment was independently verified in accordance with ISO14044 and the reference PCR by

Thomas Gloria, Industrial Ecology Consultants

This EPD conforms with ISO 21930-2007
Date of last revision: March 2021
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### Environmental Product Declaration – Calibre Storage

#### Reference Product Description

<table>
<thead>
<tr>
<th>Storage</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product Category</strong></td>
<td><strong>Occupants Supported by Product</strong></td>
</tr>
<tr>
<td>.906 m³</td>
<td>15 kg/FU</td>
</tr>
<tr>
<td>(2.97 ft³)</td>
<td>(33.07 lb)</td>
</tr>
<tr>
<td><strong>Volume</strong></td>
<td><strong>Reference Flow</strong></td>
</tr>
<tr>
<td><strong>Storage Mass</strong></td>
<td><strong>Post-Consumer Recycled Content</strong></td>
</tr>
<tr>
<td>90.5 kg</td>
<td>12%</td>
</tr>
<tr>
<td>(199.52 lbs.)</td>
<td><strong>Post-Industrial Recycled Content</strong></td>
</tr>
<tr>
<td>13%</td>
<td></td>
</tr>
</tbody>
</table>

#### Functional Unit

The functional unit is 0.15m³ of storage capacity for a period of 10 years. As Calibre has an expected service life of over 10 years, one product is needed to fulfill the functional unit.

0.15 m³ of storage capacity for a period of 10 years
## Materials Composition

<table>
<thead>
<tr>
<th>Material</th>
<th>% by mass</th>
<th>kg per functional unit</th>
<th>kg. per storage unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel</td>
<td>100%</td>
<td>15</td>
<td>90.5</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>15</td>
<td>90.5</td>
</tr>
</tbody>
</table>
A cradle-to-grave analysis was conducted for this EPD. Materials acquisition and pre-processing starts when the material is extracted from nature and ends when the material in component form reaches the gate of the production facility or service delivery operation. As such, it includes transportation between upstream suppliers and Knoll’s production facility.

The production stage is a gate-to-gate stage that starts with the product components entering the production facility and ends with the final product, packaged for shipment, leaving the facility. This stage includes manufacturing processes that take place at Knoll, along with the production of packaging materials.

Product distribution and storage are included in the next stage, along with product use and maintenance. This stage can include multiple legs of distribution and storage. The use stage begins when the consumer takes possession of the product, and includes assembly, installation, repair, and maintenance as appropriate. For products with electrical components, use stage electricity consumption is also considered.

The end-of-life stage starts when the product is ready for disposal and ends when the product is landfilled, returned to nature, or transformed to be recycled or reused. This stage includes transportation of the used product to treatment or recycling facilities and emissions associated with disposal.

### Life Cycle Assessment Results per functional unit (0.15m³ of storage capacity)

<table>
<thead>
<tr>
<th>Inventory Metric</th>
<th>Units</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net fresh water usage*</td>
<td>kg</td>
<td>215</td>
</tr>
<tr>
<td>Primary energy demand, total</td>
<td>MJ</td>
<td>819</td>
</tr>
<tr>
<td>Primary energy demand, renewable</td>
<td>MJ</td>
<td>138</td>
</tr>
<tr>
<td>Primary energy demand, non-renewable</td>
<td>MJ</td>
<td>681</td>
</tr>
</tbody>
</table>
Environmental Product Declaration
Calibre®

Life Cycle Assessment Results

Impact Assessment Categories
Impact assessment results are calculated using the TRACI 2.1 methodology (Bare, 2012).

- Global Warming Potential (100 yr) = 60.9 kg CO₂ eq.
- Global Warming Potential (20 yr) = 79.3 kg CO₂ eq.
- Acidification Potential = 0.157 kg SO₂ eq.
- Eutrophication Potential = 0.0108 kg N eq.
- Ozone Depletion = 2.11E-007 kg CFC-11 eq.
- Photochemical Ozone Creation Potential = 2.07 kg O₃ eq.

Life Cycle Assessment Results per functional unit (0.15m³ of storage capacity)

<table>
<thead>
<tr>
<th>Impact Category</th>
<th>Units</th>
<th>Materials Acquisition</th>
<th>Production</th>
<th>Distribution &amp; Use</th>
<th>End-of-Life</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global warming potential (100 yr)</td>
<td>kg CO₂ eq.</td>
<td>38.2</td>
<td>13.9</td>
<td>8.13</td>
<td>0.674</td>
<td>60.9</td>
</tr>
<tr>
<td>Global warming potential (20 yr)</td>
<td>kg CO₂ eq.</td>
<td>43.1</td>
<td>15.3</td>
<td>20.09</td>
<td>0.849</td>
<td>79.3</td>
</tr>
<tr>
<td>Acidification potential</td>
<td>kg SO₂ eq.</td>
<td>0.11</td>
<td>0.0325</td>
<td>0.01237</td>
<td>0.00204</td>
<td>0.157</td>
</tr>
<tr>
<td>Eutrophication potential</td>
<td>kg N eq.</td>
<td>0.00762</td>
<td>0.00178</td>
<td>0.001247</td>
<td>0.000148</td>
<td>0.0108</td>
</tr>
<tr>
<td>Ozone depletion</td>
<td>kg CFC-11 eq.</td>
<td>2.04E-007</td>
<td>6.57E-009</td>
<td>1.7945E-11</td>
<td>1.78E-012</td>
<td>2.11E-007</td>
</tr>
<tr>
<td>Photochemical ozone creation potential</td>
<td>kg O₃ eq.</td>
<td>1.42</td>
<td>0.337</td>
<td>0.2776</td>
<td>0.0376</td>
<td>2.07</td>
</tr>
</tbody>
</table>
• **Other Life Cycle Inventory Data**

**Life Cycle Inventory Data Per Functional Unit, Fuels**
The guiding PCR requires reporting of the inventories, per functional unit (0.15m³ of storage capacity).

<table>
<thead>
<tr>
<th>Fuels</th>
<th>Units</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fossil fuels</td>
<td>MJ</td>
<td>21.4</td>
</tr>
<tr>
<td>Nuclear fuels</td>
<td>MJ</td>
<td>0.000129</td>
</tr>
<tr>
<td>Renewable fuels</td>
<td>MJ</td>
<td>0</td>
</tr>
<tr>
<td>Miscellaneous fuels</td>
<td>MJ</td>
<td>–</td>
</tr>
</tbody>
</table>
Environmental Product Declaration
Calibre®

- **Life Cycle Impact Assessment Categories, Emissions and Wastes**

**Emissions to Air**

**Sulphur oxides**

- Materials Acquisition: 0 kg
- Production: 0 kg
- Distribution & Use: 0 kg
- End-of-Life: 0 kg
- Total: 0 kg

**Nitrogen oxides**

- Materials Acquisition: 0.0681 kg
- Production: 0 kg
- Distribution & Use: 0 kg
- End-of-Life: 0 kg
- Total: 0.0681 kg

**Carbon dioxide**

- Materials Acquisition: 51.2 kg
- Production: 0 kg
- Distribution & Use: 0 kg
- End-of-Life: 0 kg
- Total: 51.2 kg

**Methane**

- Materials Acquisition: 0.121 kg
- Production: 0 kg
- Distribution & Use: 0 kg
- End-of-Life: 0 kg
- Total: 0.121 kg

**Nitrous Oxide (laughing gas)**

- Materials Acquisition: 0.000577 kg
- Production: 0 kg
- Distribution & Use: 0 kg
- End-of-Life: 0 kg
- Total: 0.000577 kg

**Carbon monoxide**

- Materials Acquisition: 0.39 kg
- Production: 0 kg
- Distribution & Use: 0 kg
- End-of-Life: 0 kg
- Total: 0.39 kg

<table>
<thead>
<tr>
<th>Inventory Metric</th>
<th>Units</th>
<th>Materials Acquisition</th>
<th>Production</th>
<th>Distribution &amp; Use</th>
<th>End-of-Life</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulphur oxides</td>
<td>kg</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Nitrogen oxides</td>
<td>kg</td>
<td>0.0507</td>
<td>0.0134</td>
<td>0.002535</td>
<td>0.00141</td>
<td>0.0681</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>kg</td>
<td>35.4</td>
<td>13.1</td>
<td>2.139</td>
<td>0.575</td>
<td>51.2</td>
</tr>
<tr>
<td>Methane</td>
<td>kg</td>
<td>0.089</td>
<td>0.0252</td>
<td>4.33E-005</td>
<td>1.23E-005</td>
<td>0.000577</td>
</tr>
<tr>
<td>Nitrous oxide (laughing gas)</td>
<td>kg</td>
<td>0.000289</td>
<td>0.000232</td>
<td>4.33E-005</td>
<td>1.23E-005</td>
<td>0.000577</td>
</tr>
<tr>
<td>Carbon monoxide</td>
<td>kg</td>
<td>0.371</td>
<td>0.371</td>
<td>0.01215</td>
<td>0.00107</td>
<td>0.39</td>
</tr>
</tbody>
</table>
Environmental Product Declaration
Calibre®

- Life Cycle Impact Assessment Categories, Emissions and Wastes

Emissions to fresh water

<table>
<thead>
<tr>
<th>Inventory Metric</th>
<th>Units</th>
<th>Materials Acquisition</th>
<th>Production</th>
<th>Distribution &amp; Use</th>
<th>End-of-Life</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy metals</td>
<td>kg</td>
<td>0.023</td>
<td>0.00669</td>
<td>8.75E-005</td>
<td>7.18E-005</td>
<td>0.00915</td>
</tr>
<tr>
<td>Nitrate</td>
<td>kg</td>
<td>0.000829</td>
<td>0.000958</td>
<td>0.0001614</td>
<td>6.06E-005</td>
<td>0.00201</td>
</tr>
<tr>
<td>Phosphate</td>
<td>kg</td>
<td>5.29E-005</td>
<td>2.01E-005</td>
<td>2.4755E-005</td>
<td>1.79E-006</td>
<td>9.96E-005</td>
</tr>
</tbody>
</table>

Waste Management
At End-of-Life, 43.2% (by mass) of the product are assumed to be recycled, based on metal recycling statistics (US EPA, 2015).

<table>
<thead>
<tr>
<th>Inventory Metric</th>
<th>Units</th>
<th>Materials Acquisition</th>
<th>Production</th>
<th>Distribution &amp; Use</th>
<th>End-of-Life</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste (deposited) to landfill</td>
<td>kg</td>
<td>0.59</td>
<td>0.0604</td>
<td>2.99101</td>
<td>13.2</td>
<td>16.8</td>
</tr>
<tr>
<td>Hazardous waste</td>
<td>kg</td>
<td>7.98E-007</td>
<td>9.15E-008</td>
<td>2.433E-007</td>
<td>4.83E-008</td>
<td>1.18E-006</td>
</tr>
</tbody>
</table>
References and Verification


