TECHNICAL DETAILS

VIBRATION TECHNOLOGY

with Regupol® and Regufoam®
### 1.1 Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Table of Contents</td>
</tr>
<tr>
<td>1.2</td>
<td>Company Information</td>
</tr>
<tr>
<td>1.3</td>
<td>Sample Projects of Vibration Isolation and Impact Sound Insulation Under High Loads</td>
</tr>
<tr>
<td>1.4</td>
<td>Overview Technical Details Regufoam® vibration and Regupol® vibration</td>
</tr>
<tr>
<td>2</td>
<td>Technical Details Regufoam® vibration</td>
</tr>
<tr>
<td>2.1</td>
<td>Regufoam® vibration 150 plus permanent static load 0.011 N/mm²</td>
</tr>
<tr>
<td>2.2</td>
<td>Regufoam® vibration 190 plus permanent static load 0.018 N/mm²</td>
</tr>
<tr>
<td>2.3</td>
<td>Regufoam® vibration 220 plus permanent static load 0.028 N/mm²</td>
</tr>
<tr>
<td>2.4</td>
<td>Regufoam® vibration 270 plus permanent static load 0.042 N/mm²</td>
</tr>
<tr>
<td>2.5</td>
<td>Regufoam® vibration 300 plus permanent static load 0.055 N/mm²</td>
</tr>
<tr>
<td>2.6</td>
<td>Regufoam® vibration 400 plus permanent static load 0.11 N/mm²</td>
</tr>
<tr>
<td>2.7</td>
<td>Regufoam® vibration 510 plus permanent static load 0.22 N/mm²</td>
</tr>
<tr>
<td>2.8</td>
<td>Regufoam® vibration 570 plus permanent static load 0.30 N/mm²</td>
</tr>
<tr>
<td>2.9</td>
<td>Regufoam® vibration 680 plus permanent static load 0.45 N/mm²</td>
</tr>
<tr>
<td>2.10</td>
<td>Regufoam® vibration 740 plus permanent static load 0.60 N/mm²</td>
</tr>
<tr>
<td>2.11</td>
<td>Regufoam® vibration 810 plus permanent static load 0.85 N/mm²</td>
</tr>
<tr>
<td>2.12</td>
<td>Regufoam® vibration 990 plus permanent static load 2.50 N/mm²</td>
</tr>
<tr>
<td>3</td>
<td>Technical Details Regupol® vibration</td>
</tr>
<tr>
<td>3.1</td>
<td>Regupol® vibration 200 permanent static load 0.02 N/mm²</td>
</tr>
<tr>
<td>3.2</td>
<td>Regupol® vibration 300 permanent static load 0.05 N/mm²</td>
</tr>
<tr>
<td>3.3</td>
<td>Regupol® vibration 400 permanent static load 0.10 N/mm²</td>
</tr>
<tr>
<td>3.4</td>
<td>Regupol® vibration 450 permanent static load 0.12 N/mm²</td>
</tr>
<tr>
<td>3.5</td>
<td>Regupol® vibration 480 permanent static load 0.15 N/mm²</td>
</tr>
<tr>
<td>3.6</td>
<td>Regupol® vibration 550 permanent static load 0.30 N/mm²</td>
</tr>
<tr>
<td>3.7</td>
<td>Regupol® vibration 800 permanent static load 0.80 N/mm²</td>
</tr>
<tr>
<td>3.8</td>
<td>Regupol® vibration 1000 permanent static load 1.50 N/mm²</td>
</tr>
</tbody>
</table>
BSW and its subsidiaries

BSW GmbH
Am Hilgenacker 24
57319 Bad Berleburg
Germany
Phone  +49 2751 803-0
Fax  +49 2751 803-109
info@berleburger.de
www.berleburger.com
www.bsw-vibration-technology.com

German Trade Register
Siegen HRB-No. 6381

Managing Directors
Ulf Pöppel, Rainer Pöppel

VAT Reg. No.
DE 126586778

Regupol America LLC
33 Keystone Drive
Lebanon, PA 17042
USA
Phone  +1 800 537 8737
Fax  +1 717 675 2199
sales@regupol.com
www.regupol.com

Regupol Australia Pty. Ltd.
155 Smeaton Grange Road
SMEATON GRANGE NSW 2567
Australia
Phone  +61 2 4624 0050
Fax  +61 2 4647 4403
sales@regupol.com.au
www.regupol.com.au

BSW Shanghai Co. Ltd.
Delight Pacific Suites, Room 2909
No. 831 Xinzha Road
200041 Shanghai
China
Phone  +86 21 6267 3669
Fax  +86 21 6267 3369-8008
info@regupol.cn
www.regupol.cn

Regupol Acoustics Middle East FZE
P. O. Box 61201
JAFZA, Dubai
United Arab Emirates
Phone  +971 4 8811 428
Fax  +971 4 8811 438
info@regupolacousticsmiddleeast.com
www.regupolacousticsmiddleeast.com

Regupol Schweiz AG
Bahnhofstrasse 5
8953 Dietikon
Switzerland
Phone  +41 44 542 84 40
Fax  +41 44 542 84 42
c.staldegger@regupol.ch
www.regupol.ch
Vibration Isolation

AGBU administration building, Jerewan, Armenia: full-surface decoupling of the building foundation with Regupol®

Flight simulator Airbus A400M, Wunstorf, Germany: full-surface decoupling of machine foundation with Regupol®

Southampton Row, London, UK: full surface decoupling of the building foundation with Regufoam®

Nextower, Palaisquartier, Frankfurt, Germany: vibration isolation of heating, ventilating, and air conditioning with Regupol®

Kurfürstenplatz, Munich, Germany: vertical decoupling of the building foundation with Regupol®

Commuter train station, Helsinki, Finland: Regupol® ballast mats
Impact Sound Insulation Under Screed

- RTL-Studios, Cologne, Germany: room-in-room construction with Regupol® impact sound insulation under screed
- ADAC Building, Munich, Germany: Regupol® impact sound insulation under screed in in-house printing plant
- Wisselord-Studios, Hilversum, Netherlands: room-in-room construction with Regufon®
- Cinemagnum Cinema, Nuremberg, Germany: Regupol® impact sound insulation under screed in subterranean garage
- Audi plant, Győr, Hungary: impact sound insulation under screed Regupol® with in heavy-load high-bay racking
- Elbphilharmonie, Hamburg, Germany: Regupol® impact sound insulation under screed in concert halls and studios

More information at www.bsw-vibration-technology.com
Technical Details Overview

Regufoam® vibration is a mixed cell polyurethane foam for vibration isolation. It is available in 12 different qualities.

**Standard forms of delivery, ex warehouse**

**Rolls** for types 150, 190, 220, 270, 300
- Thickness: 12.5 and 25 mm, special thicknesses on request
- Length: 5,000 mm, special lengths available
- Width: 1,500 mm

**Plates** for types 400, 510, 570, 680, 740, 810, 990
- Thickness: 12.5 and 25 mm, special thicknesses on request
- Length: 1,500 mm
- Width: 1,000 mm

**Stripping/Plates**
- On request
- Die-cutting, water-jet cutting, self-adhesive versions possible

**Regufoam® vibration**

<table>
<thead>
<tr>
<th>Colour</th>
<th>150</th>
<th>190</th>
<th>220</th>
<th>270</th>
<th>300</th>
<th>400</th>
<th>510</th>
<th>570</th>
<th>680</th>
<th>740</th>
<th>810</th>
<th>990</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colour</td>
<td>Green</td>
<td>Yellow</td>
<td>Purple</td>
<td>Blue</td>
<td>Black</td>
<td>Grey</td>
<td>Beige</td>
<td>Rose</td>
<td>Turquoise</td>
<td>Red</td>
<td>Brown</td>
<td>Orange</td>
</tr>
<tr>
<td>Permanent static load N/mm²</td>
<td>0.011</td>
<td>0.018</td>
<td>0.028</td>
<td>0.042</td>
<td>0.055</td>
<td>0.11</td>
<td>0.22</td>
<td>0.30</td>
<td>0.45</td>
<td>0.60</td>
<td>0.85</td>
<td>2.50</td>
</tr>
<tr>
<td>Optimum load range N/mm²</td>
<td>0.004 to 0.011</td>
<td>0.011 to 0.018</td>
<td>0.018 to 0.028</td>
<td>0.028 to 0.042</td>
<td>0.042 to 0.055</td>
<td>0.055 to 0.11</td>
<td>0.11 to 0.22</td>
<td>0.22 to 0.30</td>
<td>0.45 to 0.60</td>
<td>0.60 to 0.85</td>
<td>0.85 to 2.50</td>
<td></td>
</tr>
<tr>
<td>Tensile strength N/mm²</td>
<td>0.31</td>
<td>0.4</td>
<td>0.5</td>
<td>0.9</td>
<td>1.2</td>
<td>1.5</td>
<td>2.4</td>
<td>2.9</td>
<td>3.6</td>
<td>4.0</td>
<td>4.6</td>
<td>6.9</td>
</tr>
<tr>
<td>Mechanical loss factor²</td>
<td>0.28</td>
<td>0.25</td>
<td>0.22</td>
<td>0.20</td>
<td>0.18</td>
<td>0.17</td>
<td>0.19</td>
<td>0.14</td>
<td>0.12</td>
<td>0.11</td>
<td>0.10</td>
<td>0.09</td>
</tr>
<tr>
<td>Static modulus of elasticity³ N/mm²</td>
<td>0.06 to 0.16</td>
<td>0.1 to 0.25</td>
<td>0.15 to 0.35</td>
<td>0.25 to 0.45</td>
<td>0.35 to 0.58</td>
<td>0.6 to 1.0</td>
<td>1.1 to 1.7</td>
<td>2.6 to 2.9</td>
<td>3.8 to 4.1</td>
<td>4.3 to 5.9</td>
<td>5.4 to 8.0</td>
<td>20.0 to 78.0</td>
</tr>
<tr>
<td>Dynamic modulus of elasticity⁴ N/mm²</td>
<td>0.15 to 0.38</td>
<td>0.25 to 0.55</td>
<td>0.35 to 0.72</td>
<td>0.60 to 1.05</td>
<td>0.68 to 1.25</td>
<td>1.2 to 2.0</td>
<td>2.2 to 2.7</td>
<td>3.6 to 6.5</td>
<td>7.0 to 10.0</td>
<td>8.9 to 13.0</td>
<td>11.0 to 16.5</td>
<td>41.0 to 160.0</td>
</tr>
<tr>
<td>Compression hardness⁵ kPa</td>
<td>14</td>
<td>22</td>
<td>22</td>
<td>63</td>
<td>82</td>
<td>170</td>
<td>330</td>
<td>620</td>
<td>840</td>
<td>1050</td>
<td>1241</td>
<td>3640</td>
</tr>
</tbody>
</table>

1. Measurement based on DIN EN ISO 1798
3. Measurement based on an EN 826.
4. Measurement based on DIN 53513; depending on frequency, load and thickness.
5. Measurement based on DIN EN ISO 3386-2; compressive stress at 25 % deformation, depending on thickness.

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows: Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied. Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.
**Regufoam® – Mixed-Cell Polyurethane Elastomers**

**Material Composition**

*Regufoam®* elastomers consist of a mixed-cell polyurethane foam. Similar to the various *Regupol®* types, *Regufoam®* isolation materials have been precisely designed for different load ranges. Various standard thicknesses of 12.5 mm, 25 mm, 37 mm and 50 mm cover a wide spectrum of support frequencies up to 8 Hz.

The successful use of polyurethanes in vibration isolation over the course of many years offers expert consultants a conventional solution and a valuable alternative to *Regupol®* elastomers.

Moreover, the BSW test lab offers the option of developing project- and application-specific elastomers with special properties.

*Regufoam®* elastomers and their specific load ranges can be distinguished from one another using colour codes (green, yellow, purple, blue, black, grey, beige, rose, turquoise, red, brown, orange).

**Possible Uses**

Due to their different dynamic rigidities and admissible load ranges, building and machine foundations can be placed elastically on strips or delicate point supports. Due to the low support frequencies, this type of support is technically efficient, but more difficult to plan and execute.

The majority of isolation jobs are performed on full-surface *Regufoam®* elastomers with lower rigidity, because this is more feasible and less error-prone.

The technical details, clearly arranged and determined as well as tested, provide a full overview of the load range of the *Regufoam®* elastomers and their non-linear material properties. They allow expert consultants to select and properly size the elastomer type that suits the situation at hand and meets its respective requirements.

*Regufoam®* elastomers are moisture- and rot-resistant. They are also ozone-resistant, but the colours may fade over time due to UV radiation. Because of their mixed-cell structure, especially types with lower dynamic rigidity can absorb water. These must be protected against water uptake.

**Effectiveness of the Regufoam® Elastomers**

*Regufoam®* elastomers can be specifically set for support frequencies between 20 Hz and 8 Hz in a broad load range from 0.011 N/mm² to 2.50 N/mm². Expert consultants in particular benefit from this large degree of flexibility.

The use of polyurethanes in vibration isolation over the course of many years offers expert consultants a conventional solution and valuable alternative. The admissible continuous load limits must be kept, as overload on the elastomers may lead to creep as well as rigidification of the material.

*Regufoam®* elastomers are produced and shipped in rolls. They can be cut to size with a standard utility knife right at the construction site. The professional company at the construction site is thus ensured that the installation is going to be simple, quick and, above all, cost-efficient.
Technical Details Overview

**Regupol® vibration** is a rubber-polyurethane-composite for vibration isolation. It is available in 8 different qualities.

**Standard forms of delivery, ex warehouse**
Depending on material. Exact dimensions are mentioned in the technical data sheets of each material type.

**Stripping/Plates**
On request
Die-cutting, water-jet cutting, self-adhesive versions possible

---

### Technical Details Overview

<table>
<thead>
<tr>
<th>Regupol® vibration</th>
<th>200</th>
<th>300</th>
<th>400</th>
<th>450</th>
<th>480</th>
<th>550</th>
<th>800</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent static load N/mm²</td>
<td>0.02</td>
<td>0.05</td>
<td>0.10</td>
<td>0.12</td>
<td>0.15</td>
<td>0.30</td>
<td>0.80</td>
<td>1.50</td>
</tr>
<tr>
<td>Optimum load range N/mm²</td>
<td>0.004 to 0.014</td>
<td>0.010 to 0.050</td>
<td>0.050 to 0.10</td>
<td>0.12 to 0.22</td>
<td>0.15 to 0.30</td>
<td>0.20 to 0.80</td>
<td>0.80 to 1.50</td>
<td></td>
</tr>
<tr>
<td>Tensile strength¹ N/mm²</td>
<td>0.12</td>
<td>0.30</td>
<td>0.34</td>
<td>0.15</td>
<td>0.36</td>
<td>0.60</td>
<td>0.90</td>
<td>2.30</td>
</tr>
<tr>
<td>Mechanical loss factor²</td>
<td>0.22</td>
<td>0.18</td>
<td>0.17</td>
<td>0.17</td>
<td>0.17</td>
<td>0.16</td>
<td>0.18</td>
<td>0.16</td>
</tr>
<tr>
<td>Static modulus of elasticity³ N/mm²</td>
<td>0.02 to 0.08</td>
<td>0.1 to 0.2</td>
<td>0.3 to 0.5</td>
<td>0.2 to 0.4</td>
<td>0.25 to 0.8</td>
<td>0.5 to 1.7</td>
<td>1.2 to 2.9</td>
<td>4.0 to 11.0</td>
</tr>
<tr>
<td>Dynamic modulus of elasticity⁴ N/mm²</td>
<td>0.05 to 0.38</td>
<td>0.2 to 1.4</td>
<td>0.9 to 2.4</td>
<td>0.45 to 2.7</td>
<td>1.2 to 3.3</td>
<td>2.5 to 7.0</td>
<td>3.6 to 18.2</td>
<td>15.0 to 45.0</td>
</tr>
<tr>
<td>Compression hardness⁵ kPa</td>
<td>14</td>
<td>50</td>
<td>180</td>
<td>83</td>
<td>220</td>
<td>415</td>
<td>545</td>
<td>1650</td>
</tr>
<tr>
<td>Fire behaviour</td>
<td>B2, E</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

1. Measurement based on DIN EN ISO 1798
3. Measurement based on an EN 826.
4. Measurement based on DIN 53513; depending on frequency, load and thickness.
5. Measurement based on DIN EN ISO 3386-2; compressive stress at 25 % deformation, depending on thickness.
6. **Regupol® vibration 450** is used for vertical isolation.

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows: Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied. Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.
Regupol® Elastomer Mats

Material Composition

Regupol® elastomers are composed of SBR and NBR rubber elements. For their production, rubber granulates, rubber fibres and rubber crumbs are combined with another, processed and elasticised with various polyurethanes using a special manufacturing method.

Eight different Regupol® elastomers are available for the daily requirements. They can be used in a very wide load range if required.

The Regupol® elastomers offer a solution that is technically sufficient as well as the most economical one available for most vibration-technology-related jobs.

Moreover, the BSW test lab offers the option of developing special, project- and application-specific types which can be given desired elastomer properties.

Regupol® elastomers can be distinguished from one another based on their individual load ranges and, accordingly, their dynamic rigidities.

Possible Uses

Regupol® elastomers are suitable for all different kinds of vibration isolation.

Due to higher dynamic rigidities and the admissible load ranges of some elastomer types, buildings and machine foundations can either be bedded elastically on strips or on delicate point supports. Due to the low support frequencies, this type of support is technically efficient, but more difficult to plan and execute. The majority of isolation jobs are performed on full-surface Regupol® elastomers with lower rigidity, because this is more feasible and less error-prone.

The technical details provide a full overview of the load range of the Regupol® elastomers and their non-linear material properties. They allow expert consultants to select and properly size the elastomer type that suits the situation at hand and meets its respective requirements.

Additional benefits of Regupol® elastomers are their excellent moisture resistance, their rot-proof properties, their ozone resistance and their permanent elasticity even after frost-thaw cycles.

The use of Regupol® is therefore admissible not only inside but also outside of buildings. The only exception here is Regupol® vibration 200. Because of its rigidity and its cellular structure this material has to be protected against water uptake.

Effectiveness of the Regupol® Elastomers

Regupol® elastomers can be specifically set for support frequencies between 20 Hz and 10 Hz in a broad load range from 0.020 N/mm² to 1.50 N/mm². Expert consultants in particular benefit from this large degree of flexibility.

The natural frequency progressions of the Regupol® elastomers are benign, offering expert consultants nearly constant natural frequencies across a wide load range. This makes for a large degree of security in planning and execution.

The creep (or creep behaviour) is low for all different Regupol® elastomers at approx. 5−7% of the total thickness. The admissible permanent load limits are kept, the only effect of overloading on the elastomers is increased rigidity (rise in dynamic rigidity and natural frequency), which shows in progressive deflection.

Regupol® elastomers are produced and shipped in rolls. They can be cut to size with a standard utility knife right at the construction site. The professional company at the construction site is thus ensured that the installation is going to be simple, quick and cost-efficient.
TECHNICAL DETAILS

VIBRATION ISOLATION

with Regufoam®

Regupol
Australia
All Tools for the Download

You will find all documents and information which you need for making a decision, for calculation as well as the installation and application of the BSW vibration technology products, at www.bsw-vibration-technology.com. In a matter of seconds you can download technical datasheets, certificates and installation instructions, all in the required file formats.

Up to date information is provided on our website and in the PDF versions of this catalogue. The PDF versions are available for download on our website.

The website www.bsw-vibration-technology.com serves mainly as a planning basis for architectural acoustics and construction engineers. You must register to use the technical documents. BSW will send you your user name and password right away. Since being put up in January 2010, this website already has several hundred registered users.
Standard forms of delivery, ex warehouse
Rolls
Thickness: 12.5 and 25 mm, special thicknesses on request
Length: 5,000 mm, special lengths available
Width: 1,500 mm

Stripping/Plates
On request
Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load
0.011 N/mm²
Continuous and variable loads/operating load range
0 to 0.016 N/mm²
Peak loads (rare, short-term loads)
0.5 N/mm²

<table>
<thead>
<tr>
<th>Static modulus of elasticity</th>
<th>Based on EN 826</th>
<th>0.06 - 0.16</th>
<th>N/mm²</th>
<th>Tangential modulus, see figure &quot;Modulus of elasticity&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynamic modulus of elasticity</td>
<td>Based on DIN 53513</td>
<td>0.15 - 0.38</td>
<td>N/mm²</td>
<td>Depending on frequency, load and thickness, see figure &quot;dynamic stiffness&quot;</td>
</tr>
<tr>
<td>Mechanical loss factor</td>
<td>DIN 53513</td>
<td>0.28</td>
<td>[-]</td>
<td>Load-, amplitude- and frequency-dependent</td>
</tr>
<tr>
<td>Compression set</td>
<td>Based on DIN EN ISO 1856</td>
<td>1.6</td>
<td>%</td>
<td>Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>Based on DIN EN ISO 1798</td>
<td>0.31</td>
<td>N/mm²</td>
<td></td>
</tr>
<tr>
<td>Elongation at break</td>
<td>Based on DIN EN ISO 1798</td>
<td>220</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Tear resistance</td>
<td>Based on DIN ISO 34-1</td>
<td>1.2</td>
<td>N/mm</td>
<td></td>
</tr>
<tr>
<td>Fire behaviour</td>
<td>DIN 4102 DIN EN 13501</td>
<td>B2 E</td>
<td>[-]</td>
<td>[-]</td>
</tr>
<tr>
<td>Sliding friction</td>
<td>BSW-laboratory BSW-laboratory</td>
<td>0.7 0.8</td>
<td>[-]</td>
<td>[-]</td>
</tr>
<tr>
<td>Compression hardness</td>
<td>Based on DIN EN ISO 3386-2</td>
<td>14</td>
<td>kPa</td>
<td>Compressive stress at 25 % deformation test specimen h = 25 mm</td>
</tr>
<tr>
<td>Rebound elasticity</td>
<td>Based on DIN EN ISO 8307</td>
<td>34</td>
<td>%</td>
<td>dependent on thickness, test specimen h = 25 mm</td>
</tr>
<tr>
<td>Force reduction</td>
<td>DIN EN 14904</td>
<td>49</td>
<td>%</td>
<td>dependent on thickness, test specimen h = 25 mm</td>
</tr>
</tbody>
</table>
Load Ranges

Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 mm x 300 mm.
Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5.

In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

**Exclusion of Liability**

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.
Vibration Isolation

Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regufoam vibration 150 plus. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Change of dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation.

Sinusoidal excitation at a constant mean load of 0.011 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.

Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.

Change of mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.011 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.

Influence of Amplitude

Change of dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation.

Sinusoidal excitation at a constant mean load of 0.011 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.

Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.
Standard forms of delivery, ex warehouse

Rolls
- Thickness: 12.5 and 25 mm, special thicknesses on request
- Length: 5,000 mm, special lengths available
- Width: 1,500 mm

Stripping/Plates
- On request
- Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load
- 0.018 N/mm²

Continuous and variable loads/operating load range
- 0 to 0.028 N/mm²

Peak loads (rare, short-term loads)
- 0.8 N/mm²

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static modulus of elasticity</td>
<td>Based on EN 826</td>
<td>0.1 - 0.25 N/mm²</td>
</tr>
<tr>
<td>Dynamic modulus of elasticity</td>
<td>Based on DIN 53513</td>
<td>0.25 - 0.55 N/mm²</td>
</tr>
<tr>
<td>Mechanical loss factor</td>
<td>DIN 53513</td>
<td>0.25 [-] Load-, amplitude- and frequency-dependent</td>
</tr>
<tr>
<td>Compression set</td>
<td>Based on DIN EN ISO 1856</td>
<td>2.0 % Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>Based on DIN EN ISO 1798</td>
<td>0.4 N/mm²</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>Based on DIN EN ISO 1798</td>
<td>220 %</td>
</tr>
<tr>
<td>Tear resistance</td>
<td>Based on DIN ISO 34-1</td>
<td>2.0 N/mm</td>
</tr>
<tr>
<td>Fire behaviour</td>
<td>DIN 4102 DIN EN 13501</td>
<td>B2 E [-] Normal flammability</td>
</tr>
<tr>
<td>Sliding friction</td>
<td>BSW-laboratory</td>
<td>0.7 [-] Steel (dry)</td>
</tr>
<tr>
<td>Compressive hardness</td>
<td>Based on DIN EN ISO 3386-2</td>
<td>22 kPa Compressive stress at 25 % deformation test specimen h = 25 mm</td>
</tr>
<tr>
<td>Rebound elasticity</td>
<td>Based on DIN EN ISO 8307</td>
<td>35 % dependent on thickness, test specimen h = 25 mm</td>
</tr>
<tr>
<td>Force reduction</td>
<td>DIN EN 14904</td>
<td>61 % dependent on thickness, test specimen h = 25 mm</td>
</tr>
</tbody>
</table>
Load Ranges

Regufoam® vibration

Pressure [N/mm²]
Deflection [mm]

Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 mm x 300 mm.

Load Deflection

Regufoam® vibration 190 plus

Examined in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 mm x 300 mm.
Modulus of Elasticity

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5.

In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperatures, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperatures, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

Modulus of Elasticity

Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Dynamic Stiffness

Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperatures, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

Long-Term Creep Test

Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 50 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperatures, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.
Vibration Isolation

Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regufoam® vibration 190 plus. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

Change of dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.018 N/mm². Dimensions of the specimens 300 mm x 300 mm x 25 mm.

Change of mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.018 N/mm². Dimensions of the specimens 300 mm x 300 mm x 25 mm.
### Standard forms of delivery, ex warehouse

- **Rolls**
  - Thickness: 12.5 and 25 mm, special thicknesses on request
  - Length: 5,000 mm, special lengths available
  - Width: 1,500 mm

- **Stripping/Plates**
  - On request
  - Die-cutting, water-jet cutting, self-adhesive versions possible

### Continuous static load

- 0.028 N/mm²

### Continuous and variable loads/operating load range

- 0 to 0.04 N/mm²

### Peak loads (rare, short-term loads)

- 0.9 N/mm²

---

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static modulus of elasticity</td>
<td>0.15 - 0.35 N/mm²</td>
</tr>
<tr>
<td>Dynamic modulus of elasticity</td>
<td>0.35 - 0.72 N/mm²</td>
</tr>
<tr>
<td>Mechanical loss factor</td>
<td>0.22 [-]</td>
</tr>
<tr>
<td>Compression set</td>
<td>2.3 %</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>0.5 N/mm²</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>180 %</td>
</tr>
<tr>
<td>Tear resistance</td>
<td>2.1 N/mm</td>
</tr>
<tr>
<td>Fire behaviour</td>
<td>B2 E [-]</td>
</tr>
<tr>
<td>Sliding friction</td>
<td>0.7 [-]</td>
</tr>
<tr>
<td>Compression hardness</td>
<td>39 kPa</td>
</tr>
<tr>
<td>Rebound elasticity</td>
<td>47 %</td>
</tr>
<tr>
<td>Force reduction</td>
<td>69 %</td>
</tr>
</tbody>
</table>

---

- Based on EN 826
- Based on DIN 53513
- Based on DIN 53513
- Based on DIN EN ISO 1856
- Based on DIN EN ISO 1798
- Based on DIN ISO 34-1
- Based on DIN 4102
- Based on DIN EN ISO 3386-2
- Based on DIN EN ISO 8307
- Based on DIN EN 14904
- Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs

---

- Normal flammability
- Steel (dry)
- Concrete (dry)
- Compressive stress at 25 % deformation test specimen h = 25 mm
- Dependent on thickness, test specimen h = 25 mm
Regufoam®

Load Ranges

Regufoam® vibration

Load Deflection

Regufoam® vibration 220 plus

Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 mm x 300 mm.
Modulus of Elasticity

Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Dynamic Stiffness

Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Long-Term Creep Test

Dimensions of specimens 300 mm x 300 mm x 50 mm

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.
Vibration Isolation

Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regufoam vibration 220 plus. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base. Dimensions of test specimens 300 mm x 300 mm.

Influence of Amplitude

Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.028 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.

Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.028 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.
**Standard forms of delivery, ex warehouse**

**Rolls**
Thickness: 12.5 and 25 mm, special thicknesses on request  
Length: 5,000 mm, special lengths available  
Width: 1,500 mm

**Stripping/Plates**
On request  
Die-cutting, water-jet cutting, self-adhesive versions possible

**Continuous static load**
0.042 N/mm²

**Continuous and variable loads/operating load range**
0 to 0.062 N/mm²

**Peak loads (rare, short-term loads)**
1.2 N/mm²

---

### Mechanical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Standard/Methodology</th>
<th>Value 1</th>
<th>Value 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static modulus of elasticity</td>
<td>Based on EN 826</td>
<td>0.25 - 0.45 N/mm²</td>
<td></td>
</tr>
<tr>
<td>Dynamic modulus of elasticity</td>
<td>Based on DIN 53513</td>
<td>0.60 - 1.05 N/mm²</td>
<td></td>
</tr>
<tr>
<td>Mechanical loss factor</td>
<td>DIN 53513</td>
<td>0.2</td>
<td>[-]</td>
</tr>
<tr>
<td>Compression set</td>
<td>Based on DIN EN ISO 1856</td>
<td>3.2</td>
<td>%</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>Based on DIN EN ISO 1798</td>
<td>0.9</td>
<td>N/mm²</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>Based on DIN EN ISO 1798</td>
<td>210</td>
<td>%</td>
</tr>
<tr>
<td>Tear resistance</td>
<td>Based on DIN ISO 34-1</td>
<td>4.5</td>
<td>N/mm</td>
</tr>
</tbody>
</table>
| Fire behaviour                   | DIN 4102, DIN ISO 13501 | B2 | [-]  
|                                 | Steel (dry)          | E     | [-]  
| Sliding friction                 | BSW-laboratory       | 0.7    | [-]  
|                                 | Concrete (dry)       | 0.8   | [-]  
| Compression hardness             | Based on DIN EN ISO 3386-2 | 63 | kPa  |
| Rebound elasticity               | Based on DIN EN ISO 8307 | 38 | %  |
| Force reduction                  | DIN EN 14904         | 70     | %  |
Load Ranges

Regufoam® vibration

Load Deflection

Regufoam® vibration 270 plus

Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 mm x 300 mm.
Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5.

In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

---

**Modulus of Elasticity**

[Graph showing modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.]

**Dynamic Stiffness**

[Graph showing dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.]

---

**Long-Term Creep Test**

[Graph showing deflection (%) of thickness over duration of load (h). Dimensions of specimens 300 mm x 300 mm x 50 mm.]

---

---
Vibration Isolation

Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regufoam® vibration 270 plus. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of Regufoam® vibration 270 plus on a rigid base. Dimensions of test specimens 300 mm x 300 mm.

Influence of Amplitude

Change of dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.042 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.

Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.

Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.042 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.
**Regufoam®**

**vibration 300 plus**

---

**Standard forms of delivery, ex warehouse**

**Rolls**

- Thickness: 12.5 and 25 mm, special thicknesses on request
- Length: 5,000 mm, special lengths available
- Width: 1,500 mm

**Stripping/Plates**

- On request
- Die-cutting, water-jet cutting, self-adhesive versions possible

**Continuous static load**

- 0.055 N/mm²

**Continuous and variable loads/operating load range**

- 0 to 0.08 N/mm²

**Peak loads (rare, short-term loads)**

- 2 N/mm²

---

<table>
<thead>
<tr>
<th>Static modulus of elasticity</th>
<th>Based on EN 826</th>
<th>0.35 - 0.58 N/mm²</th>
<th>Tangential modulus, see figure “Modulus of elasticity”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynamic modulus of elasticity</td>
<td>Based on DIN 53513</td>
<td>0.68 - 1.25 N/mm²</td>
<td>Depending on frequency, load and thickness, see figure “dynamic stiffness”</td>
</tr>
<tr>
<td>Mechanical loss factor</td>
<td>DIN 53513</td>
<td>0.18</td>
<td>[-] Load-, amplitude- and frequency-dependent</td>
</tr>
<tr>
<td>Compression set</td>
<td>Based on DIN EN ISO 1856</td>
<td>3.4 %</td>
<td>Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>Based on DIN EN ISO 1798</td>
<td>1.2 N/mm²</td>
<td></td>
</tr>
<tr>
<td>Elongation at break</td>
<td>Based on DIN EN ISO 1798</td>
<td>240 %</td>
<td></td>
</tr>
<tr>
<td>Tear resistance</td>
<td>Based on DIN ISO 34-1</td>
<td>4.8 N/mm</td>
<td></td>
</tr>
<tr>
<td>Fire behaviour</td>
<td>DIN 4102 DIN EN 13501</td>
<td>B2 [-] E [-]</td>
<td>Normal flammability</td>
</tr>
<tr>
<td>Sliding friction</td>
<td>BSW-laboratory BSW-laboratory</td>
<td>0.6 [-] 0.75 [-]</td>
<td>Steel (dry) Concrete (dry)</td>
</tr>
<tr>
<td>Compression hardness</td>
<td>Based on DIN EN ISO 3386-2</td>
<td>82 kPa</td>
<td>Compressive stress at 25 % deformation test specimen h = 25 mm</td>
</tr>
<tr>
<td>Rebound elasticity</td>
<td>Based on DIN EN ISO 8307</td>
<td>44 %</td>
<td>dependent on thickness, test specimen h = 25 mm</td>
</tr>
<tr>
<td>Force reduction</td>
<td>DIN EN 14904</td>
<td>72 %</td>
<td>dependent on thickness, test specimen h = 25 mm</td>
</tr>
</tbody>
</table>

---

Colour: Black

---

Regufoam® 300, Version 2, Release 04 2016, sheet 1 of 2
Load Ranges

Regufoam® vibration

Load Deflection

Regufoam® vibration 300 plus

Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 mm x 300 mm.
Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5.

In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.
Vibration Isolation

Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regufoam® vibration 300 plus. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of Regufoam® vibration 300 plus on a rigid base. Dimensions of test specimens 300 mm x 300 mm.

Influence of Amplitude

Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.055 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.

Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.055 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.
### Standard forms of delivery, ex warehouse

**Plates**
- Thickness: 12.5 and 25 mm, special thicknesses on request
- Length: 1,500 mm, special lengths available
- Width: 1,000 mm

**Stripping/smaller sizes**
- On request
- Die-cutting, water-jet cutting, self-adhesive versions possible

### Continuous static load
- 0.11 N/mm²

### Continuous and variable loads/operating load range
- 0 to 0.16 N/mm²

### Peak loads (rare, short-term loads)
- Up to 3 N/mm²

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static modulus of elasticity</td>
<td>Based on EN 826</td>
</tr>
<tr>
<td>Dynamic modulus of elasticity</td>
<td>Based on DIN 53513</td>
</tr>
<tr>
<td>Mechanical loss factor</td>
<td>DIN 53513</td>
</tr>
<tr>
<td>Compression set</td>
<td>Based on DIN EN ISO 1856</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>Based on DIN EN ISO 1798</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>Based on DIN EN ISO 1798</td>
</tr>
<tr>
<td>Tear resistance</td>
<td>Based on DIN ISO 34-1</td>
</tr>
</tbody>
</table>
| Fire behaviour                | DIN 4102  
|                               | DIN EN 13501 |
| Sliding friction              | BSW-laboratory  
|                               | BSW-laboratory |
| Compression hardness          | Based on DIN EN ISO 3386-2 |
| Rebound elasticity            | Based on DIN EN ISO 8307 |
| Force reduction               | DIN EN 14904 |

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous static load</td>
<td>0.11 N/mm²</td>
</tr>
<tr>
<td>Continuous and variable loads/operating load range</td>
<td>0 to 0.16 N/mm²</td>
</tr>
<tr>
<td>Peak loads (rare, short-term loads)</td>
<td>Up to 3 N/mm²</td>
</tr>
</tbody>
</table>

### Mechanical Properties

- **Tangential modulus**, see figure “Modulus of elasticity”
- **Dynamic modulus of elasticity**, depending on frequency, load and thickness, see figure “dynamic stiffness”
- **Compression set**, measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
- **Tensile strength**
- **Elongation at break**
- **Tear resistance**
- **Fire behaviour**
- **Sliding friction**  
  - Steel (dry)  
  - Concrete (dry)
- **Compression hardness**
- **Rebound elasticity**, dependent on thickness, test specimen h = 25 mm
- **Force reduction**, dependent on thickness, test specimen h = 25 mm

### Notes
- Based on EN 826
- Based on DIN 53513
- Based on DIN EN ISO 1856
- Based on DIN EN ISO 1798
- Based on DIN EN ISO 13501
- Based on DIN EN ISO 3386-2
- Based on DIN EN ISO 8307
**Load Ranges**

Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 mm x 300 mm.

---

**Load Deflection**

---

Regufoam® vibration 400 plus

Pressure [N/mm²] vs. Deflection [mm]

**Permanent load in N/mm²**

- 0.011
- 0.018
- 0.028
- 0.042
- 0.055
- 0.11
- 0.22
- 0.30
- 0.45
- 0.60
- 0.85
- 2.50

**Regufoam® type designation**

- 150
- 190
- 220
- 270
- 300
- 400
- 510
- 570
- 680
- 740
- 810
- 990

Regufoam® vibration 400 plus

---

Regufoam®, Version 2, Release 04 2016, sheet 1 of 2
Modulus of Elasticity

**Regufoam® vibration 400 plus**

Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Dynamic Stiffness

**Regufoam® vibration 400 plus**

Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Long-Term Creep Test

**Regufoam® vibration 400 plus**

Illustration of the long-term creep test. Dimensions of specimens 300 mm x 300 mm x 50 mm.

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleuber.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on Tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperatures, humidity etc.). Thus, special agreements on material parameters might be necessary on a case-by-case basis.
Vibration Isolation

Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regufoam® vibration 400 plus. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of Regufoam® vibration 400 plus on a rigid base. Dimensions of test specimens 300 mm x 300 mm.

Influence of Amplitude

Change of dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation.

Sinusoidal excitation at a constant mean load of 0.11 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.

Change of mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.11 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.
### Regufoam® vibration 510 plus

**Standard forms of delivery, ex warehouse**
- **Plates**
  - Thickness: 12.5 and 25 mm, special thicknesses on request
  - Length: 1,500 mm, special lengths available
  - Width: 1,000 mm

**Stripping/smaller sizes**
- On request
- Die-cutting, water-jet cutting, self-adhesive versions possible

**Continuous static load**
- 0.22 N/mm²

**Continuous and variable loads/operating load range**
- 0 to 0.32 N/mm²

**Peak loads (rare, short-term loads)**
- up to 4 N/mm²

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static modulus of elasticity</td>
<td>Based on EN 826</td>
</tr>
<tr>
<td>Dynamic modulus of elasticity</td>
<td>Based on DIN 53513</td>
</tr>
<tr>
<td>Mechanical loss factor</td>
<td>DIN 53513</td>
</tr>
<tr>
<td>Compression set</td>
<td>Based on DIN EN ISO 1856</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>Based on DIN EN ISO 1798</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>Based on DIN EN ISO 1798</td>
</tr>
<tr>
<td>Tear resistance</td>
<td>Based on DIN ISO 34-1</td>
</tr>
<tr>
<td>Fire behaviour</td>
<td>DIN 4102</td>
</tr>
<tr>
<td>Sliding friction</td>
<td>BSW-laboratory</td>
</tr>
<tr>
<td>Compression hardness</td>
<td>Based on DIN EN ISO 3386-2</td>
</tr>
<tr>
<td>Rebound elasticity</td>
<td>Based on DIN EN ISO 8307</td>
</tr>
<tr>
<td>Force reduction</td>
<td>DIN EN 14904</td>
</tr>
</tbody>
</table>

- **Colour**: Beige

---

Regufoam® 510, Version 2, Release 04 2016, sheet 1 of 2
Load Ranges

Load Deflection

Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 mm x 300 mm.
Modulus of Elasticity

Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Dynamic Stiffness

Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 25 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Long-Term Creep Test

Illustration of the creep test for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 50 mm.

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of Sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5. Insofar, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperatures, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.
Vibration Isolation

Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regufoam® vibration 510 plus. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of Regufoam® vibration 510 plus on a rigid base. Dimensions of test specimens 300 mm x 300 mm x 25 mm.

Influence of Amplitude

Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.22 N/mm², dimensions of the specimen 300 mm x 300 mm x 25 mm.

Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.

Change of mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.22 N/mm², dimensions of the specimen 300 mm x 300 mm x 25 mm.
Standard forms of delivery, ex warehouse
Plates
Thickness: 12.5 and 25 mm, special thicknesses on request
Length: 1,500 mm, special lengths available
Width: 1,000 mm

Stripping/smaller sizes
On request
Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load
0.30 N/mm²
Continuous and variable loads/operating load range
0 to 0.42 N/mm²
Peak loads (rare, short-term loads)
up to 4.5 N/mm²

<table>
<thead>
<tr>
<th>Static modulus of elasticity</th>
<th>Based on EN 826</th>
<th>2.6 - 2.9</th>
<th>N/mm²</th>
<th>Tangential modulus, see figure “Modulus of elasticity”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynamic modulus of elasticity</td>
<td>Based on DIN 53513</td>
<td>5.3 - 6.5</td>
<td>N/mm²</td>
<td>Depending on frequency, load and thickness, see figure “dynamic stiffness”</td>
</tr>
<tr>
<td>Mechanical loss factor</td>
<td>DIN 53513</td>
<td>0.14</td>
<td>[-]</td>
<td>Load-, amplitude- and frequency-dependent</td>
</tr>
<tr>
<td>Compression set</td>
<td>Based on DIN EN ISO 1856</td>
<td>4.4</td>
<td>%</td>
<td>Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>Based on DIN EN ISO 1798</td>
<td>2.9</td>
<td>N/mm²</td>
<td></td>
</tr>
<tr>
<td>Elongation at break</td>
<td>Based on DIN EN ISO 1798</td>
<td>210</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Tear resistance</td>
<td>Based on DIN ISO 34-1</td>
<td>14.1</td>
<td>N/mm</td>
<td></td>
</tr>
<tr>
<td>Fire behaviour</td>
<td>DIN 4102 DIN EN 13501</td>
<td>B2 E</td>
<td>[-]</td>
<td>[ - ] Normal flammability</td>
</tr>
<tr>
<td>Sliding friction</td>
<td>BSW-laboratory BSW-laboratory</td>
<td>0.6 0.7</td>
<td>[-]</td>
<td>Steel (dry) Concrete (dry)</td>
</tr>
<tr>
<td>Compression hardness</td>
<td>Based on DIN EN ISO 3386-2</td>
<td>620</td>
<td>kPa</td>
<td>Compressive stress at 25 % deformation test specimen h = 25 mm</td>
</tr>
<tr>
<td>Rebound elasticity</td>
<td>Based on DIN EN ISO 8307</td>
<td>58</td>
<td>%</td>
<td>dependent on thickness, test specimen h = 25 mm</td>
</tr>
<tr>
<td>Force reduction</td>
<td>DIN EN 14904</td>
<td>50</td>
<td>%</td>
<td>dependent on thickness, test specimen h = 25 mm</td>
</tr>
</tbody>
</table>
Load Ranges

Regufoam® vibration

Load Deflection

Regufoam® vibration 570 plus

Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 mm x 300 mm.
Modulus of Elasticity

![Modulus of Elasticity](image1)

Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ±0.25mm. Dimensions of specimens 300 mm x 300 mm x 25 mm, static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Dynamic Stiffness

![Dynamic Stiffness](image2)

Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ±0.25mm. Dimensions of specimens 300 mm x 300 mm x 25 mm, static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Long-Term Creep Test

![Long-Term Creep Test](image3)

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berlunger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperatures, humidity etc.). Thus, special agreements on material parameters might be necessary on a case-by-case basis.
Vibration Isolation

Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regufoam® vibration 570 plus. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of Regufoam® vibration 570 plus on a rigid base. Dimensions of test specimens 300 mm x 300 mm.

Influence of Amplitude

Change of the dynamic stiffness due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.30 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.

Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.30 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.
Regufoam® vibration 680 plus

**Standard forms of delivery, ex warehouse**

**Plates**
- Thickness: 12.5 and 25 mm, special thicknesses on request
- Length: 1,500 mm, special lengths available
- Width: 1,000 mm

**Stripping/smaller sizes**
- On request
- Die-cutting, water-jet cutting, self-adhesive versions possible

**Continuous static load**
- 0.45 N/mm²

**Continuous and variable loads/operating load range**
- 0 to 0.62 N/mm²

**Peak loads (rare, short-term loads)**
- up to 5 N/mm²

### Mechanical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static modulus of elasticity</td>
<td>Based on EN 826</td>
<td>3.8 - 4.1 N/mm²</td>
</tr>
<tr>
<td>Dynamic modulus of elasticity</td>
<td>Based on DIN 53513</td>
<td>7.0 - 10.0 N/mm²</td>
</tr>
<tr>
<td>Mechanical loss factor</td>
<td>DIN 53513</td>
<td>0.12 [-]</td>
</tr>
<tr>
<td>Compression set</td>
<td>Based on DIN EN ISO 1856</td>
<td>6.2 %</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>Based on DIN EN ISO 1798</td>
<td>3.6 N/mm²</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>Based on DIN EN ISO 1798</td>
<td>230 %</td>
</tr>
<tr>
<td>Tear resistance</td>
<td>Based on DIN ISO 34-1</td>
<td>18.5 N/mm</td>
</tr>
<tr>
<td>Fire behaviour</td>
<td>DIN 4102 DIN 13501</td>
<td>B2 E [-] [-]</td>
</tr>
<tr>
<td>Sliding friction</td>
<td>BSW-laboratory</td>
<td>0.6 [-]</td>
</tr>
<tr>
<td>Compression hardness</td>
<td>Based on DIN EN ISO 3386-2</td>
<td>840 kPa</td>
</tr>
<tr>
<td>Rebound elasticity</td>
<td>Based on DIN EN ISO 8307</td>
<td>58 %</td>
</tr>
<tr>
<td>Force reduction</td>
<td>DIN EN 14904</td>
<td>44 %</td>
</tr>
</tbody>
</table>

**Notes**
- Load-, amplitude- and frequency-dependent
- Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs

**Corresponding standards**
- Based on EN 826
- Based on DIN 53513
- Based on DIN EN ISO 1856
- Based on DIN EN ISO 1798
- Based on DIN ISO 34-1
- Based on EN 14904
- Based on DIN EN 13501
- Based on DIN EN 13501
- Based on BSW-laboratory
- Based on BSW-laboratory
- Based on DIN EN ISO 3386-2
- Based on DIN EN ISO 8307
- Based on BSW-laboratory

**Fire behaviour**
- Normal flammability
- Steel (dry)
- Concrete (dry)

**Compression stress at 25% deformation**
- test specimen h = 25 mm

---

Colour: Turquoise
Load Ranges

Regufoam® vibration

Pressure [N/mm²]
Deflection [mm]

Load Deflection

Regufoam® vibration 680 plus

Permanent load in N/mm²

Pressure [N/mm²]
Static load range
Optimum load range

Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 mm x 300 mm.
Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5.

In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variability due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

**Exclusion of Liability**

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variability due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.
Vibration Isolation

**Natural Frequency**

Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regufoam® vibration 680 plus. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Static load range

Dynamic range

Optimum load range

Change of natural frequency [%]

Difference in natural frequency [%]

Change of mechanical loss factor [%]

Sinusoidal excitation at a constant mean load of 0.45 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.

Regufoam® vibration 680 plus

Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation.

Sinusoidal excitation at a constant mean load of 0.45 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.

Optimum load range

Change of mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.45 N/mm², dimensions of the specimens 300 mm x 300 mm x 25 mm.
Regufoam® vibration 740 plus

Standard forms of delivery, ex warehouse
Plates
Thickness: 12.5 and 25 mm, special thicknesses on request
Length: 1,500 mm, special lengths available
Width: 1,000 mm

Stripping/smaller sizes
On request
Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load
0.60 N/mm²
Continuous and variable loads/operating load range
0 to 0.85 N/mm²
Peak loads (rare, short-term loads)
up to 6 N/mm²

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static modulus of elasticity</td>
<td>Based on EN 826</td>
</tr>
<tr>
<td>Dynamic modulus of elasticity</td>
<td>Based on DIN 53513</td>
</tr>
<tr>
<td>Mechanical loss factor</td>
<td>DIN 53513</td>
</tr>
<tr>
<td>Compression set</td>
<td>Based on DIN EN ISO 1856</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>Based on DIN EN ISO 1798</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>Based on DIN EN ISO 1798</td>
</tr>
<tr>
<td>Tear resistance</td>
<td>Based on DIN ISO 34-1</td>
</tr>
<tr>
<td>Fire behaviour</td>
<td>DIN 4102 DIN EN 13501</td>
</tr>
<tr>
<td>Sliding friction</td>
<td>BSW-laboratory</td>
</tr>
<tr>
<td>Compression hardness</td>
<td>Based on DIN EN ISO 3386-2</td>
</tr>
<tr>
<td>Rebound elasticity</td>
<td>Based on DIN EN ISO 8307</td>
</tr>
<tr>
<td>Force reduction</td>
<td>DIN EN 14904</td>
</tr>
</tbody>
</table>

Colour: Red

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangential modulus, see figure</td>
<td>&quot;Modulus of elasticity&quot;</td>
</tr>
<tr>
<td>Depending on frequency, load</td>
<td>and thickness, see figure &quot;dynamic</td>
</tr>
<tr>
<td>amplitude- and frequency-dependent</td>
<td>stiffness&quot;</td>
</tr>
<tr>
<td>Measured 30 minutes after</td>
<td>decompression with 50% deformation / 23</td>
</tr>
<tr>
<td>compression with 50% deformation</td>
<td>°C after 72 hrs</td>
</tr>
<tr>
<td>Normal flammability</td>
<td>B2</td>
</tr>
<tr>
<td>Steel (dry)</td>
<td>Concrete (dry)</td>
</tr>
<tr>
<td>Compressive stress at 25 %</td>
<td>deformation test specimen h = 25 mm</td>
</tr>
<tr>
<td>dependent on thickness, test</td>
<td>specimen h = 25 mm</td>
</tr>
<tr>
<td>specimen h = 25 mm</td>
<td></td>
</tr>
</tbody>
</table>

Regufoam® 740, Version 2, Release 04 2016, sheet 1 of 2
Load Ranges

Load Deflection

Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 250 mm x 250 mm.
Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5.

In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variations due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5.

In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variations due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

---

**Regufoam®**

**vibration 740 plus**

### Modulus of Elasticity

![Graph of Modulus of Elasticity](image)

Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 250 mm x 250 mm x 25 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

### Long-Term Creep Test

![Graph of Long-Term Creep Test](image)

Dimensions of specimens 250 mm x 250 mm x 50 mm

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5.

In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variations due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.
Vibration Isolation

Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regufoam® vibration 740 plus. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of Regufoam® vibration 740 plus on a rigid base. Dimensions of test specimens 250 mm x 250 mm.

Influence of Amplitude

Change of dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.60 N/mm², dimensions of the specimens 250 mm x 250 mm x 50 mm.

Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.

Change of mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.60 N/mm², dimensions of the specimens 250 mm x 250 mm x 50 mm.
Standard forms of delivery, ex warehouse

Plates
- Thickness: 12.5 and 25 mm, special thicknesses on request
- Length: 1,500 mm, special lengths available
- Width: 1,000 mm

Stripping/smaller sizes
- On request
- Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load
- 0.85 N/mm²

Continuous and variable loads/operating load range
- 0 to 1.20 N/mm²

Peak loads (rare, short-term loads)
- up to 7 N/mm²

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static modulus of elasticity</td>
<td>Based on EN 826</td>
</tr>
<tr>
<td>Dynamic modulus of elasticity</td>
<td>Based on DIN 53513</td>
</tr>
<tr>
<td>Mechanical loss factor</td>
<td>DIN 53513</td>
</tr>
<tr>
<td>Compression set</td>
<td>Based on DIN EN ISO 1856</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>Based on DIN EN ISO 1798</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>Based on DIN EN ISO 1798</td>
</tr>
<tr>
<td>Tear resistance</td>
<td>Based on DIN ISO 34-1</td>
</tr>
<tr>
<td>Fire behaviour</td>
<td>DIN 4102 DIN EN 13501</td>
</tr>
<tr>
<td>Sliding friction</td>
<td>BSW-laboratory</td>
</tr>
<tr>
<td>Compression hardness</td>
<td>Based on DIN EN ISO 3386-2</td>
</tr>
<tr>
<td>Rebound elasticity</td>
<td>Based on DIN EN ISO 8307</td>
</tr>
<tr>
<td>Force reduction</td>
<td>DIN EN 14904</td>
</tr>
</tbody>
</table>

Colour: Brown

Regufoam® vibration 810 plus
Load Ranges

Regufoam® vibration

<table>
<thead>
<tr>
<th>Regufoam® type designation</th>
<th>Load Deflection</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>0.011</td>
</tr>
<tr>
<td>190</td>
<td>0.018</td>
</tr>
<tr>
<td>220</td>
<td>0.028</td>
</tr>
<tr>
<td>270</td>
<td>0.042</td>
</tr>
<tr>
<td>300</td>
<td>0.055</td>
</tr>
<tr>
<td>400</td>
<td>0.11</td>
</tr>
<tr>
<td>510</td>
<td>0.22</td>
</tr>
<tr>
<td>570</td>
<td>0.30</td>
</tr>
<tr>
<td>680</td>
<td>0.45</td>
</tr>
<tr>
<td>740</td>
<td>0.60</td>
</tr>
<tr>
<td>810</td>
<td>0.85</td>
</tr>
<tr>
<td>990</td>
<td>2.50</td>
</tr>
</tbody>
</table>

Permanent load in N/mm²

Load Deflection

Regufoam® vibration 810 plus

Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 250 mm x 250 mm.
Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5.

In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5.

In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.
Vibration Isolation

Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regufoam® vibration 810 plus. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of Regufoam® vibration 810 plus on a rigid base. Dimensions of test specimens 250 mm x 250 mm.

Influence of Amplitude

Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.85 N/mm², dimensions of the specimens 250 mm x 250 mm x 25 mm.

Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.85 N/mm², dimensions of the specimens 250 mm x 250 mm x 25 mm.
Standard forms of delivery, ex warehouse

Plates
- Thickness: 12.5 and 25 mm, special thicknesses on request
- Length: 1,500 mm, special lengths available
- Width: 1,000 mm

Stripping/smaller sizes
- On request
- Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load
- 2.5 N/mm²

Continuous and variable loads/operating load range
- 0 to 3.5 N/mm²

Peak loads (rare, short-term loads)
- up to 8.0 N/mm²

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
<th>Unit</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static modulus of elasticity</td>
<td>Based on EN 826</td>
<td>N/mm²</td>
<td>20.0 - 78.0</td>
</tr>
<tr>
<td>Dynamic modulus of elasticity</td>
<td>Based on DIN 53513</td>
<td>N/mm²</td>
<td>41.0 - 160.0</td>
</tr>
<tr>
<td>Mechanical loss factor</td>
<td>DIN 53513</td>
<td>[-]</td>
<td>0.09</td>
</tr>
<tr>
<td>Compression set</td>
<td>Based on DIN EN ISO 1856</td>
<td>%</td>
<td>8.6</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>Based on DIN EN ISO 1798</td>
<td>N/mm²</td>
<td>6.9</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>Based on DIN EN ISO 1798</td>
<td>%</td>
<td>190</td>
</tr>
<tr>
<td>Tear resistance</td>
<td>Based on DIN ISO 34-1</td>
<td>N/mm</td>
<td>34.5</td>
</tr>
<tr>
<td>Fire behaviour</td>
<td>DIN 4102 DIN EN 13501</td>
<td>[-]</td>
<td>B2 E [-]</td>
</tr>
<tr>
<td>Sliding friction</td>
<td>BSW-laboratory</td>
<td>[-]</td>
<td>0.5 [-]</td>
</tr>
<tr>
<td>Compression hardness</td>
<td>Based on DIN EN ISO 3386-2</td>
<td>kPa</td>
<td>3640</td>
</tr>
<tr>
<td>Rebound elasticity</td>
<td>Based on DIN EN ISO 8307</td>
<td>%</td>
<td>55 %</td>
</tr>
<tr>
<td>Force reduction</td>
<td>DIN EN 14904</td>
<td>%</td>
<td>20 %</td>
</tr>
</tbody>
</table>

Colour: Orange
Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 125 mm x 125 mm.
Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5.

In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

---

**Exclusion of Liability**

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.
Vibration Isolation

Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regufoam® vibration 990 plus. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of Regufoam® vibration 990 plus on a rigid base. Dimensions of test specimens 125 mm x 125 mm.

Influence of Amplitude

In order to get information of changes in mechanical loss or dynamic stiffness due to changes in amplitudes please ask technical staff of BSW.
TECHNICAL DETAILS

VIBRATION ISOLATION

WITH REGUPOL®
All Tools for the Download

You will find all documents and information which you need for making a decision, for calculation as well as the installation and application of the BSW vibration technology products, at www.bsw-vibration-technology.com. In a matter of seconds you can download technical datasheets, certificates and installation instructions, all in the required file formats.

Up to date information is provided on our website and in the PDF versions of this catalogue. The PDF versions are available for download on our website.

The website www.bsw-vibration-technology.com serves mainly as a planning basis for architectural acoustics and construction engineers. You must register to use the technical documents. BSW will send you your user name and password right away. Since being put up in January 2010, this website already has several hundred registered users.
Standard forms of delivery, ex warehouse

**Rolls**
- Thickness: 17 mm, dimpled
- Length: 10,000 mm, special lengths available
- Width: 1,250 mm

**Stripping/Plates**
- On request
- Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load
- 0.02 N/mm²
- Peak loads (rare, short-term loads)
- 0.05 N/mm²

The material must be carefully and permanently protected against moisture during transport, storage, processing and use. Wet material may not be used.

<table>
<thead>
<tr>
<th>Property</th>
<th>Basis of Standard</th>
<th>Value 1</th>
<th>Value 2</th>
<th>Value 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static modulus of elasticity</td>
<td>Based on EN 826</td>
<td>0.02</td>
<td>0.08</td>
<td>N/mm²</td>
</tr>
<tr>
<td>Dynamic modulus of elasticity</td>
<td>Based on DIN 53513</td>
<td>0.05</td>
<td>0.38</td>
<td>N/mm²</td>
</tr>
<tr>
<td>Mechanical loss factor</td>
<td>DIN 53513</td>
<td>0.22</td>
<td>[-]</td>
<td></td>
</tr>
<tr>
<td>Compression set</td>
<td>Based on DIN EN ISO 1856</td>
<td>3.1</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Tensile strength</td>
<td>Based on DIN EN ISO 1798</td>
<td>0.12</td>
<td>N/mm²</td>
<td></td>
</tr>
<tr>
<td>Elongation at break</td>
<td>Based on DIN EN ISO 1798</td>
<td>40</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Tear resistance</td>
<td>Based on DIN ISO 34-1</td>
<td>1.0</td>
<td>N/mm</td>
<td></td>
</tr>
<tr>
<td>Fire behaviour</td>
<td>DIN 4102, DIN EN 13501</td>
<td>B2 E</td>
<td>[-] [-]</td>
<td></td>
</tr>
<tr>
<td>Sliding friction</td>
<td>BSW-laboratory, BSW-laboratory</td>
<td>0.7</td>
<td>0.8</td>
<td>[-] [-]</td>
</tr>
<tr>
<td>Compression hardness</td>
<td>Based on DIN EN ISO 3386-2</td>
<td>14</td>
<td>kPa</td>
<td></td>
</tr>
<tr>
<td>Rebound elasticity</td>
<td>Based on DIN EN ISO 8307</td>
<td>14</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Force reduction</td>
<td>DIN EN 14904</td>
<td>73</td>
<td>%</td>
<td></td>
</tr>
</tbody>
</table>
Load Ranges

Regupol® vibration

Load Deflection

Regupol® vibration 200

Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 mm x 300 mm.
3.1 Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperatures, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.
Vibration Isolation

Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regupol® vibration 200. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of Regupol® vibration 200 on a rigid base. Dimensions of leaf specimens 300 mm x 300 mm.

Influence of Amplitude

Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.011 N/mm², dimensions of the specimens 300 mm x 300 mm x 51 mm.

Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.011 N/mm², dimensions of the specimens 300 mm x 300 mm x 51 mm.
**Regupol® vibration 300**

**3.2**

**Standard forms of delivery, ex warehouse**
- **Rolls**
  - Thickness: 17 mm, dimpled
  - Length: 10,000 mm, special lengths available
  - Width: 1,250 mm

**Stripping/Plates**
- On request
- Die-cutting, water-jet cutting, self-adhesive versions possible

**Continuous static load**
- 0.05 N/mm²

**Peak loads (rare, short-term loads)**
- 0.08 N/mm²

<table>
<thead>
<tr>
<th>Property</th>
<th>Based on EN 826</th>
<th>0.1 - 0.2 N/mm²</th>
<th>Based on DIN 53513</th>
<th>0.2 - 1.4 N/mm²</th>
<th>Based on DIN 53513</th>
<th>0.18 %</th>
<th>Depending on frequency, load and thickness, see figure “dynamic stiffness”</th>
<th>DIN 53513</th>
<th>0.18 %</th>
<th>Load-, amplitude- and frequency-dependent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Static modulus of elasticity</strong></td>
<td>Based on EN 826</td>
<td>0.1 - 0.2 N/mm²</td>
<td>Based on DIN 53513</td>
<td>0.2 - 1.4 N/mm²</td>
<td>Based on DIN 53513</td>
<td>0.18 %</td>
<td>Depending on frequency, load and thickness, see figure “dynamic stiffness”</td>
<td>DIN 53513</td>
<td>0.18 %</td>
<td>Load-, amplitude- and frequency-dependent</td>
</tr>
<tr>
<td><strong>Dynamic modulus of elasticity</strong></td>
<td>Based on EN 826</td>
<td>0.1 - 0.2 N/mm²</td>
<td>Based on DIN 53513</td>
<td>0.2 - 1.4 N/mm²</td>
<td>Based on DIN 53513</td>
<td>0.18 %</td>
<td>Depending on frequency, load and thickness, see figure “dynamic stiffness”</td>
<td>DIN 53513</td>
<td>0.18 %</td>
<td>Load-, amplitude- and frequency-dependent</td>
</tr>
<tr>
<td><strong>Mechanical loss factor</strong></td>
<td>DIN 53513</td>
<td>0.18 %</td>
<td>DIN 53513</td>
<td>0.18 %</td>
<td>DIN 53513</td>
<td>0.18 %</td>
<td>Load-, amplitude- and frequency-dependent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Compression set</strong></td>
<td>Based on EN 826</td>
<td>0.1 - 0.2 N/mm²</td>
<td>Based on DIN 53513</td>
<td>0.2 - 1.4 N/mm²</td>
<td>Based on DIN 53513</td>
<td>0.18 %</td>
<td>Depending on frequency, load and thickness, see figure “dynamic stiffness”</td>
<td>DIN 53513</td>
<td>0.18 %</td>
<td>Load-, amplitude- and frequency-dependent</td>
</tr>
<tr>
<td><strong>Tensile strength</strong></td>
<td>Based on EN 826</td>
<td>0.1 - 0.2 N/mm²</td>
<td>Based on DIN 53513</td>
<td>0.2 - 1.4 N/mm²</td>
<td>Based on DIN 53513</td>
<td>0.18 %</td>
<td>Depending on frequency, load and thickness, see figure “dynamic stiffness”</td>
<td>DIN 53513</td>
<td>0.18 %</td>
<td>Load-, amplitude- and frequency-dependent</td>
</tr>
<tr>
<td><strong>Elongation at break</strong></td>
<td>Based on EN 826</td>
<td>0.1 - 0.2 N/mm²</td>
<td>Based on DIN 53513</td>
<td>0.2 - 1.4 N/mm²</td>
<td>Based on DIN 53513</td>
<td>0.18 %</td>
<td>Depending on frequency, load and thickness, see figure “dynamic stiffness”</td>
<td>DIN 53513</td>
<td>0.18 %</td>
<td>Load-, amplitude- and frequency-dependent</td>
</tr>
<tr>
<td><strong>Tear resistance</strong></td>
<td>Based on EN 826</td>
<td>0.1 - 0.2 N/mm²</td>
<td>Based on DIN 53513</td>
<td>0.2 - 1.4 N/mm²</td>
<td>Based on DIN 53513</td>
<td>0.18 %</td>
<td>Depending on frequency, load and thickness, see figure “dynamic stiffness”</td>
<td>DIN 53513</td>
<td>0.18 %</td>
<td>Load-, amplitude- and frequency-dependent</td>
</tr>
<tr>
<td><strong>Fire behaviour</strong></td>
<td>DIN 4102</td>
<td>0.1 - 0.2 N/mm²</td>
<td>DIN 53513</td>
<td>0.2 - 1.4 N/mm²</td>
<td>DIN 53513</td>
<td>0.18 %</td>
<td>Depending on frequency, load and thickness, see figure “dynamic stiffness”</td>
<td>DIN 53513</td>
<td>0.18 %</td>
<td>Load-, amplitude- and frequency-dependent</td>
</tr>
<tr>
<td><strong>Sliding friction</strong></td>
<td>Based on EN 826</td>
<td>0.1 - 0.2 N/mm²</td>
<td>Based on DIN 53513</td>
<td>0.2 - 1.4 N/mm²</td>
<td>Based on DIN 53513</td>
<td>0.18 %</td>
<td>Depending on frequency, load and thickness, see figure “dynamic stiffness”</td>
<td>DIN 53513</td>
<td>0.18 %</td>
<td>Load-, amplitude- and frequency-dependent</td>
</tr>
<tr>
<td><strong>Compression hardness</strong></td>
<td>Based on EN 826</td>
<td>0.1 - 0.2 N/mm²</td>
<td>Based on DIN 53513</td>
<td>0.2 - 1.4 N/mm²</td>
<td>Based on DIN 53513</td>
<td>0.18 %</td>
<td>Depending on frequency, load and thickness, see figure “dynamic stiffness”</td>
<td>DIN 53513</td>
<td>0.18 %</td>
<td>Load-, amplitude- and frequency-dependent</td>
</tr>
<tr>
<td><strong>Rebound elasticity</strong></td>
<td>Based on EN 826</td>
<td>0.1 - 0.2 N/mm²</td>
<td>Based on DIN 53513</td>
<td>0.2 - 1.4 N/mm²</td>
<td>Based on DIN 53513</td>
<td>0.18 %</td>
<td>Depending on frequency, load and thickness, see figure “dynamic stiffness”</td>
<td>DIN 53513</td>
<td>0.18 %</td>
<td>Load-, amplitude- and frequency-dependent</td>
</tr>
<tr>
<td><strong>Force reduction</strong></td>
<td>Based on EN 826</td>
<td>0.1 - 0.2 N/mm²</td>
<td>Based on DIN 53513</td>
<td>0.2 - 1.4 N/mm²</td>
<td>Based on DIN 53513</td>
<td>0.18 %</td>
<td>Depending on frequency, load and thickness, see figure “dynamic stiffness”</td>
<td>DIN 53513</td>
<td>0.18 %</td>
<td>Load-, amplitude- and frequency-dependent</td>
</tr>
<tr>
<td><strong>Ozone resistance</strong></td>
<td>DIN 4102</td>
<td>0.1 - 0.2 N/mm²</td>
<td>DIN 53513</td>
<td>0.2 - 1.4 N/mm²</td>
<td>DIN 53513</td>
<td>0.18 %</td>
<td>Depending on frequency, load and thickness, see figure “dynamic stiffness”</td>
<td>DIN 53513</td>
<td>0.18 %</td>
<td>Load-, amplitude- and frequency-dependent</td>
</tr>
</tbody>
</table>
Load Ranges

Regupol® vibration

Permanent load in N/mm²

N/mm²

Load Deflection

Regupol® vibration 300

Pressure [N/mm²]

Deflection [mm]

Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 mm x 300 mm.
Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.
Vibration Isolation

Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regupol® vibration 300. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of Regupol® vibration 300 on a rigid base. Dimensions of leaf specimens 300 mm x 300 mm.

Influence of Amplitude

Change of dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.05 N/mm², dimensions of the specimens 300 mm x 300 mm x 51 mm.

Change of mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.05 N/mm², dimensions of the specimens 300 mm x 300 mm x 51 mm.
**Standard forms of delivery, ex warehouse**

**Rolls**
- Thickness: 15 mm, dimpled
- Length: 10,000 mm, special lengths available
- Width: 1,250 mm

**Stripping/Plates**
- On request
- Die-cutting, water-jet cutting, self-adhesive versions possible

**Continuous static load**
- 0.10 N/mm²

**Peak loads (rare, short-term loads)**
- 0.15 N/mm²

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
<th>Value</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static modulus of elasticity</td>
<td>Based on EN 826</td>
<td>0.3 - 0.55 N/mm²</td>
<td>Tangential modulus, see figure “Modulus of elasticity”</td>
</tr>
<tr>
<td>Dynamic modulus of elasticity</td>
<td>Based on DIN 53513</td>
<td>0.9 - 2.4 N/mm²</td>
<td>Depending on frequency, load and thickness, see figure “dynamic stiffness”</td>
</tr>
<tr>
<td>Mechanical loss factor</td>
<td>DIN 53513</td>
<td>0.17 [-]</td>
<td>Load-, amplitude- and frequency-dependent</td>
</tr>
<tr>
<td>Compression set</td>
<td>Based on DIN EN ISO 1856</td>
<td>2.1 %</td>
<td>Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>Based on DIN EN ISO 1798</td>
<td>0.34 N/mm²</td>
<td></td>
</tr>
<tr>
<td>Elongation at break</td>
<td>Based on DIN EN ISO 1798</td>
<td>55 %</td>
<td></td>
</tr>
<tr>
<td>Tear resistance</td>
<td>Based on DIN ISO 34-1</td>
<td>3.2 N/mm</td>
<td></td>
</tr>
<tr>
<td>Fire behaviour</td>
<td>DIN 4102, DIN EN 13501</td>
<td>B2 E [-] [-]</td>
<td>Normal flammability</td>
</tr>
<tr>
<td>Sliding friction</td>
<td>BSW-laboratory</td>
<td>0.7 - 0.8 [-]</td>
<td>Steel (dry), Concrete (dry)</td>
</tr>
<tr>
<td>Compression hardness</td>
<td>Based on DIN EN ISO 3386-2</td>
<td>180 kPa</td>
<td>Compressive stress at 25 % deformation test specimen h = 60 mm</td>
</tr>
<tr>
<td>Rebound elasticity</td>
<td>Based on DIN EN ISO 8307</td>
<td>22 %</td>
<td>dependent on thickness, test specimen h = 60 mm</td>
</tr>
<tr>
<td>Force reduction</td>
<td>DIN EN 14904</td>
<td>73 %</td>
<td>dependent on thickness, test specimen h = 60 mm</td>
</tr>
<tr>
<td>Ozone resistance</td>
<td>DIN EN ISO 17025</td>
<td>Cracking stage 0 [-]</td>
<td></td>
</tr>
</tbody>
</table>
### Load Ranges

<table>
<thead>
<tr>
<th>Regupol® vibration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.50</td>
</tr>
<tr>
<td>0.80</td>
</tr>
<tr>
<td>0.30</td>
</tr>
<tr>
<td>0.15</td>
</tr>
<tr>
<td>0.12</td>
</tr>
<tr>
<td>0.10</td>
</tr>
<tr>
<td>0.05</td>
</tr>
<tr>
<td>0.02</td>
</tr>
</tbody>
</table>

**Regupol® type designation**

- 0.02
- 0.05
- 0.10
- 0.12
- 0.15
- 0.30
- 0.80
- 1.50

Permanent load in N/mm²

### Load Deflection

**Regupol® vibration 400**

- Static load range

Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 mm x 300 mm.
Modulus of Elasticity

Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 45 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Dynamic Stiffness

Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 300 mm x 300 mm x 45 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Long-Term Creep Test

Dimensions of specimens 300 mm x 300 mm x 60 mm

Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5.

In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperatures, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.
Vibration Isolation

Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regupol® vibration 400. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base. Dimensions of test specimens 300 mm x 300 mm.

Influence of Amplitude

Change of dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.10 N/mm², dimensions of the specimens 300 mm x 300 mm x 60 mm.

Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.

Change of mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.10 N/mm², dimensions of the specimens 300 mm x 300 mm x 60 mm.
Standard forms of delivery, ex warehouse

Plates
- Thickness: 50 mm, special thickness available
- Length: 1,000 mm
- Width: 500 mm

Continuous static load
0.12 N/mm²

Peak loads (rare, short-term loads)
0.18 N/mm²

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static modulus of elasticity</td>
<td>0.2 - 0.4 N/mm²</td>
<td>Based on EN 826</td>
</tr>
<tr>
<td>Dynamic modulus of elasticity</td>
<td>0.45 - 2.7 N/mm²</td>
<td>Based on DIN 53513</td>
</tr>
<tr>
<td>Mechanical loss factor</td>
<td>0.17 [-]</td>
<td>DIN 53513</td>
</tr>
<tr>
<td>Compression set</td>
<td>4.1 %</td>
<td>Based on DIN EN ISO 1856</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>0.15 N/mm²</td>
<td>Based on DIN EN ISO 1798</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>40 %</td>
<td>Based on DIN EN ISO 1798</td>
</tr>
<tr>
<td>Tear resistance</td>
<td>1.9 N/mm</td>
<td>Based on DIN ISO 34-1</td>
</tr>
<tr>
<td>Fire behaviour</td>
<td>B2 E [-]</td>
<td>DIN 4102, DIN EN 13501</td>
</tr>
<tr>
<td>Sliding friction</td>
<td>0.5 [-] [-]</td>
<td>BSW-laboratory</td>
</tr>
<tr>
<td>Compression hardness</td>
<td>83 kPa</td>
<td>Based on DIN EN ISO 3386-2</td>
</tr>
<tr>
<td>Rebound elasticity</td>
<td>42.7 %</td>
<td>Based on DIN EN ISO 8307</td>
</tr>
<tr>
<td>Force reduction</td>
<td>74 %</td>
<td>DIN EN 14904</td>
</tr>
<tr>
<td>Ozone resistance</td>
<td>Cracking stage 0 [-]</td>
<td>DIN EN ISO 17025</td>
</tr>
</tbody>
</table>

Based on EN 826
Based on DIN 53513
Based on DIN EN ISO 1856
Tangential modulus, see figure “Modulus of elasticity”
Depending on frequency, load and thickness, see figure “dynamic stiffness”
Load-, amplitude- and frequency-dependent
Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs

- Normal flammability
- Steel (dry)
- Concrete (dry)
Load Ranges

Regupol® vibration

Permanent load in N/mm²

0.02 0.05 0.10 0.12 0.15 0.30 0.80 1.50

Regupol® type designation

Load Deflection

Regupol® vibration 450

Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 mm x 300 mm.
**Exclusion of Liability**

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.beierbrauer.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variations due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.
Vibration Isolation

Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regupol® vibration 450. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of Regupol® vibration 450 on a rigid base. Dimensions of leaf specimens 300 mm x 300 mm.

Influence of Amplitude

Change of dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.10 N/mm², dimensions of the specimens 300 mm x 300 mm x 50 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.

Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.10 N/mm², dimensions of the specimens 300 mm x 300 mm x 50 mm.
**Regupol® vibration 480**

### Standard forms of delivery, ex warehouse

**Rolls**
- Thickness: 15 mm
- Length: 10,000 mm, special length available
- Width: 1,250 mm

**Stripping/Plates**
- On request
- Die-cutting, water-jet cutting, self-adhesive versions possible

### Continuous static load
- 0.15 N/mm²

### Peak loads (rare, short-term loads)
- 0.25 N/mm²

### Mechanical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Standard</th>
<th>Value</th>
<th>Unit</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static modulus of elasticity</td>
<td>Based on EN 826</td>
<td>0.25 - 0.8</td>
<td>N/mm²</td>
<td>Based on EN 826</td>
</tr>
<tr>
<td>Dynamic modulus of elasticity</td>
<td>Based on DIN 53513</td>
<td>1.2 - 3.3</td>
<td>N/mm²</td>
<td>Depending on frequency, load and thickness, see figure “dynamic stiffness”</td>
</tr>
<tr>
<td>Mechanical loss factor</td>
<td>DIN 53513</td>
<td>0.17</td>
<td>[-]</td>
<td>Load-, amplitude- and frequency-dependent</td>
</tr>
<tr>
<td>Compression set</td>
<td>Based on DIN EN ISO 1856</td>
<td>3.0</td>
<td>%</td>
<td>Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>Based on DIN EN ISO 1798</td>
<td>0.36</td>
<td>N/mm²</td>
<td>Based on DIN EN ISO 1798</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>Based on DIN EN ISO 1798</td>
<td>55</td>
<td>%</td>
<td>Based on DIN EN ISO 1798</td>
</tr>
<tr>
<td>Tear resistance</td>
<td>Based on DIN ISO 34-1</td>
<td>4.5</td>
<td>N/mm</td>
<td>Based on DIN ISO 34-1</td>
</tr>
<tr>
<td>Fire behaviour</td>
<td>DIN 4102 DIN EN 13501</td>
<td>B2 E</td>
<td>[-] [-]</td>
<td>Normal flammability</td>
</tr>
<tr>
<td>Sliding friction</td>
<td>BSW-laboratory</td>
<td>0.7 0.8</td>
<td>[-] [-]</td>
<td>Steel (dry) Concrete (dry)</td>
</tr>
<tr>
<td>Compression hardness</td>
<td>Based on DIN EN ISO 3386-2</td>
<td>220</td>
<td>kPa</td>
<td>Compressive stress at 25 % deformation test specimen h = 60 mm</td>
</tr>
<tr>
<td>Rebound elasticity</td>
<td>Based on DIN EN ISO 8307</td>
<td>31</td>
<td>%</td>
<td>dependent on thickness, test specimen h = 60 mm</td>
</tr>
<tr>
<td>Force reduction</td>
<td>DIN EN 14904</td>
<td>72</td>
<td>%</td>
<td>dependent on thickness, test specimen h = 60 mm</td>
</tr>
<tr>
<td>Ozone resistance</td>
<td>DIN EN ISO 17025</td>
<td>Cracking stage 0</td>
<td>[-]</td>
<td></td>
</tr>
</tbody>
</table>

### Notes
- Based on EN 826
- Based on DIN 53513
- Based on DIN EN ISO 1856
- Based on DIN EN ISO 1798
- Based on DIN EN ISO 3386-2
- Based on DIN ISO 34-1
- Based on DIN EN ISO 8307
- Based on DIN EN 14904
- Based on DIN EN ISO 17025
Load Ranges

Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 mm x 300 mm.
Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.
Vibration Isolation

Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regupol® vibration 480. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of Regupol® vibration 480 on a rigid base. Dimensions of leaf specimens 300 mm x 300 mm.

Influence of Amplitude

Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.10 N/mm², dimensions of the specimens 300 mm x 300 mm x 60 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.

Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.10 N/mm², dimensions of the specimens 300 mm x 300 mm x 60 mm.
### Standard forms of delivery, ex warehouse

**Rolls**
- **Thickness:** 15 mm
- **Length:** 10,000 mm, special length available
- **Width:** 1,250 mm

**Stripping/Plates**
- On request
- Die-cutting, water-jet cutting, self-adhesive versions possible

### Continuous static load

- **0.30 N/mm²**
- **Peak loads (rare, short-term loads)**
  - **0.40 N/mm²**

## Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
<th>Value</th>
<th>Unit</th>
<th>Measurement Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static modulus of elasticity</td>
<td>Based on EN 826</td>
<td>0.5 - 1.7</td>
<td>N/mm²</td>
<td>Based on EN 826</td>
</tr>
<tr>
<td>Dynamic modulus of elasticity</td>
<td>Based on DIN 53513</td>
<td>2.5 - 7.0</td>
<td>N/mm²</td>
<td>Based on DIN 53513, load and thickness, see figure “dynamic stiffness”</td>
</tr>
<tr>
<td>Mechanical loss factor</td>
<td>DIN 53513</td>
<td>0.16</td>
<td>[-]</td>
<td>Load-, amplitude- and frequency-dependent</td>
</tr>
<tr>
<td>Compression set</td>
<td>Based on DIN EN ISO 1856</td>
<td>3.4</td>
<td>%</td>
<td>Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>Based on DIN EN ISO 1798</td>
<td>0.6</td>
<td>N/mm²</td>
<td>Based on DIN EN ISO 1798</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>Based on DIN EN ISO 1798</td>
<td>65</td>
<td>%</td>
<td>Based on DIN EN ISO 1798</td>
</tr>
<tr>
<td>Tear resistance</td>
<td>Based on DIN ISO 34-1</td>
<td>5.0</td>
<td>N/mm</td>
<td>Based on DIN ISO 34-1</td>
</tr>
<tr>
<td>Fire behaviour</td>
<td>DIN 4102 DIN EN 13501</td>
<td>B2 E</td>
<td>[-] [-]</td>
<td>Steel (dry) Concrete (dry)</td>
</tr>
<tr>
<td>Sliding friction</td>
<td>BSW-laboratory</td>
<td>0.7 0.8</td>
<td>[-] [-]</td>
<td>Steel (dry) Concrete (dry)</td>
</tr>
<tr>
<td>Compression hardness</td>
<td>Based on DIN EN ISO 3386-2</td>
<td>415</td>
<td>kPa</td>
<td>Compressive stress at 25 % deformation test specimen h = 60 mm</td>
</tr>
<tr>
<td>Rebound elasticity</td>
<td>Based on DIN EN ISO 8307</td>
<td>36</td>
<td>%</td>
<td>dependent on thickness, test specimen h = 60 mm</td>
</tr>
<tr>
<td>Force reduction</td>
<td>DIN EN 14904</td>
<td>65</td>
<td>%</td>
<td>dependent on thickness, test specimen h = 60 mm</td>
</tr>
<tr>
<td>Ozone resistance</td>
<td>DIN EN ISO 17025</td>
<td>Cracking stage 0</td>
<td>[-]</td>
<td></td>
</tr>
</tbody>
</table>

Based on EN 826
Based on DIN 53513
Based on DIN EN ISO 1856
Based on DIN EN ISO 1798
Based on DIN ISO 34-1
Based on DIN 4102
Based on BSW-laboratory
Based on DIN EN ISO 3386-2
Based on DIN EN ISO 8307
Based on DIN EN 14904
Based on DIN EN ISO 17025

Regupol® 550, Version 2, Release 04 2016, sheet 1 of 2
Load Ranges

**Regupol® vibration**

Permanent load in N/mm²

<table>
<thead>
<tr>
<th>Load Deflection</th>
<th>Regupol® type designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.02</td>
<td>200 300 400 450 480 550 800 1000</td>
</tr>
<tr>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td>0.10</td>
<td></td>
</tr>
<tr>
<td>0.12</td>
<td></td>
</tr>
<tr>
<td>0.15</td>
<td></td>
</tr>
<tr>
<td>0.30</td>
<td></td>
</tr>
<tr>
<td>0.80</td>
<td></td>
</tr>
<tr>
<td>1.50</td>
<td></td>
</tr>
</tbody>
</table>

Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 300 mm x 300 mm.
Exclusion of Liability

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5.

In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

Modulus of Elasticity

Dynamic Stiffness

Long-Term Creep Test
Vibration Isolation

Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regupol® vibration 550. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of Regupol® vibration 550 on a rigid base. Dimensions of leaf specimens 300 mm x 300 mm.

Influence of Amplitude

Change of dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.25 N/mm², dimensions of the specimens 300 mm x 300 mm x 60 mm.

Change of mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.25 N/mm², dimensions of the specimens 300 mm x 300 mm x 60 mm.
### Standard forms of delivery, ex warehouse

**Rolls**
- **Thickness:** 10 mm
- **Length:** 8,000 mm, special length available
- **Width:** 1,250 mm

**Stripping/Plates**
- On request
- Die-cutting, water-jet cutting, self-adhesive versions possible

### Continuous static load
- **0.80 N/mm²**
- **Peak loads (rare, short-term loads)**
  - **1.00 N/mm²**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static modulus of elasticity</td>
<td>Based on EN 826</td>
<td>1.2 - 2.9</td>
</tr>
<tr>
<td>Dynamic modulus of elasticity</td>
<td>Based on DIN 53513</td>
<td>3.6 - 18.2</td>
</tr>
<tr>
<td>Mechanical loss factor</td>
<td>DIN 53513</td>
<td>0.18</td>
</tr>
<tr>
<td>Compression set</td>
<td>Based on DIN EN ISO 1856</td>
<td>3.7</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>Based on DIN EN ISO 1798</td>
<td>0.9</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>Based on DIN EN ISO 1798</td>
<td>70</td>
</tr>
<tr>
<td>Tear resistance</td>
<td>Based on DIN ISO 34-1</td>
<td>8.0</td>
</tr>
<tr>
<td>Fire behaviour</td>
<td>DIN 4102 DIN EN 13501</td>
<td>B2 E</td>
</tr>
<tr>
<td>Sliding friction</td>
<td>BSW-laboratory BSW-laboratory</td>
<td>0.7 0.8</td>
</tr>
<tr>
<td>Compression hardness</td>
<td>Based on DIN EN ISO 3386-2</td>
<td>545</td>
</tr>
<tr>
<td>Rebound elasticity</td>
<td>Based on DIN EN ISO 8307</td>
<td>30</td>
</tr>
<tr>
<td>Force reduction</td>
<td>DIN EN 14904</td>
<td>61</td>
</tr>
<tr>
<td>Ozone resistance</td>
<td>DIN EN ISO 17025</td>
<td>Cracking stage 0</td>
</tr>
</tbody>
</table>

### Additional Properties
- Based on EN 826
- Based on DIN 53513
- Based on DIN EN ISO 1856
- Based on DIN EN ISO 1798
- Based on DIN ISO 34-1
- Based on DIN EN 13501
- Based on BSW-laboratory
- Based on DIN EN ISO 3386-2
- Based on DIN EN ISO 8307
- Based on DIN EN 14904
- Based on DIN EN ISO 17025

- **Dynamic modulus of elasticity:** Depending on frequency, load and thickness, see figure “dynamic stiffness”
- **Mechanical loss factor:** Load-, amplitude- and frequency-dependent
- **Compression set:** Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs

---

*Regupol® 800, Version 2, Release 04 2016, sheet 1 of 2*
### Load Ranges

<table>
<thead>
<tr>
<th>Regupol® vibration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pressure [N/mm²]</strong></td>
</tr>
<tr>
<td>0.02</td>
</tr>
<tr>
<td>0.05</td>
</tr>
<tr>
<td>0.10</td>
</tr>
<tr>
<td>0.12</td>
</tr>
<tr>
<td>0.15</td>
</tr>
<tr>
<td>0.30</td>
</tr>
<tr>
<td>0.80</td>
</tr>
<tr>
<td>1.50</td>
</tr>
</tbody>
</table>

**Regupol® type designation**

<table>
<thead>
<tr>
<th>200</th>
<th>300</th>
<th>400</th>
<th>450</th>
<th>480</th>
<th>550</th>
<th>800</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Load Deflection

**Regupol® vibration 800**

Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading.

Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 250 mm x 250 mm.
**Exclusion of Liability**

Technical services and offers based on these are subject to our General Terms and Conditions of Sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5. In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperature, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.

---

**Modulus of Elasticity**

![Modulus of Elasticity Graph](image)

Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 250 mm x 250 mm x 40 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

**Dynamic Stiffness**

![Dynamic Stiffness Graph](image)

Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 250 mm x 250 mm x 40 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

**Long-Term Creep Test**

![Long-Term Creep Test Graph](image)

Dimensions of specimens 250 mm x 250 mm x 60 mm
Vibration Isolation

Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regupol® vibration 800. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base. Dimensions of test specimens 250 mm x 250 mm.

Influence of Amplitude

Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 0.80 N/mm², dimensions of the specimens 250 mm x 250 mm x 60 mm.

Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.

Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 0.80 N/mm², dimensions of the specimens 250 mm x 250 mm x 60 mm.
Standard forms of delivery, ex warehouse

Rolls
- Thickness: 10 mm
- Length: 8,000 mm, special length available
- Width: 1,250 mm

Stripping/Plates
- On request
- Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load
- 1.50 N/mm²

Peak loads (rare, short-term loads)
- 1.75 N/mm²

<table>
<thead>
<tr>
<th>Static modulus of elasticity</th>
<th>Based on EN 826</th>
<th>4.0 - 11.0</th>
<th>N/mm²</th>
<th>Tangential modulus, see figure “Modulus of elasticity”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynamic modulus of elasticity</td>
<td>Based on DIN 53513</td>
<td>15.0 - 45.0</td>
<td>N/mm²</td>
<td>Depending on frequency, load and thickness, see figure “dynamic stiffness”</td>
</tr>
<tr>
<td>Mechanical loss factor</td>
<td>DIN 53513</td>
<td>0.16</td>
<td>[-]</td>
<td>Load-, amplitude- and frequency-dependent</td>
</tr>
<tr>
<td>Compression set</td>
<td>Based on DIN EN ISO 1856</td>
<td>4.9</td>
<td>%</td>
<td>Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>Based on DIN EN ISO 1798</td>
<td>2.3</td>
<td>N/mm²</td>
<td></td>
</tr>
<tr>
<td>Elongation at break</td>
<td>Based on DIN EN ISO 1798</td>
<td>110</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Tear resistance</td>
<td>Based on DIN ISO 34-1</td>
<td>15.0</td>
<td>N/mm</td>
<td></td>
</tr>
<tr>
<td>Fire behaviour</td>
<td>DIN 4102 DIN EN 13501</td>
<td>B2 E</td>
<td>[-] [-]</td>
<td>Normal flammability</td>
</tr>
<tr>
<td>Sliding friction</td>
<td>BSW-laboratory BSW-laboratory</td>
<td>0.6 0.7</td>
<td>[-] [-]</td>
<td>Steel (dry) Concrete (dry)</td>
</tr>
<tr>
<td>Compression hardness</td>
<td>Based on DIN EN ISO 3386-2</td>
<td>1650</td>
<td>kPa</td>
<td>Compressive stress at 25 % deformation test specimen h = 60 mm</td>
</tr>
<tr>
<td>Rebound elasticity</td>
<td>Based on DIN EN ISO 8307</td>
<td>37</td>
<td>%</td>
<td>dependent on thickness, test specimen h = 60 mm</td>
</tr>
<tr>
<td>Force reduction</td>
<td>DIN EN 14904</td>
<td>45</td>
<td>%</td>
<td>dependent on thickness, test specimen h = 60 mm</td>
</tr>
<tr>
<td>Ozone resistance</td>
<td>DIN EN ISO 17025</td>
<td>Cracking stage 0</td>
<td>[-]</td>
<td></td>
</tr>
</tbody>
</table>
Load Ranges

Regupol® vibration

Load Deflection

Regupol® vibration 1000

Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 200 mm x 200 mm.
**Modulus of Elasticity**

Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 200 mm x 200 mm x 40 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

**Dynamic Stiffness**

Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 200 mm x 200 mm x 40 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

---

**Long-Term Creep Test**

Dimensions of specimens 200 mm x 200 mm x 60 mm

---

**Exclusion of Liability**

Technical services and offers based on these are subject to our General Terms and Conditions of sale, a copy of which can be found on our website www.berleburger.com. Special attention should be paid to paragraphs 4 and 5.

In so far, please be advised as follows:

Our expertise is the development and manufacturing of products. With our recommendation we can only assist you in selecting a product that is suitable for your demand. However, we cannot act as your architect or consulting expert. This would only be possible subject to a separately concluded service contract that we would have to bill you for. Such contracts are not part of our scope of supply and services. Hence, our recommendation does not lay claim for its correctness. Guarantees do only apply to the technical properties of the material supplied.

Comment on tolerances: All technical values correspond to our current state of knowledge and are to be understood as reference values only. These values can be subject to considerable variabilities due to production and/or material reasons as well as due to outside influences (temperatures, humidity etc.). Thus special agreements on material parameters might be necessary on a case-by-case basis.
Vibration Isolation

Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with Regupol\textsuperscript{®} vibration 1000. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

Natural Frequency

Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of Regupol\textsuperscript{®} vibration 1000 on a rigid base. Dimensions of test specimens 200 mm x 200 mm.

Influence of Amplitude

Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation.

Sinusoidal excitation at a constant mean load of 1.50 N/mm\(^2\), dimensions of the specimens 200 mm x 200 mm x 60 mm.

Change of mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 1.50 N/mm\(^2\), dimensions of the specimens 200 mm x 200 mm x 60 mm.
The technical information given in the documents are guideline values. They are liable to manufacturing tolerances, which may vary depending on the type of underlying properties. The currently valid versions of this information are provided on our internet pages and in the PDF versions of this catalogue. The PDF versions are available to download from our website.

We do not assume liability for spelling or printing errors.

Download or request additional information about the Regupol family of Vibration Isolation and Impact Sound Proofing products at www.regupol.com.au