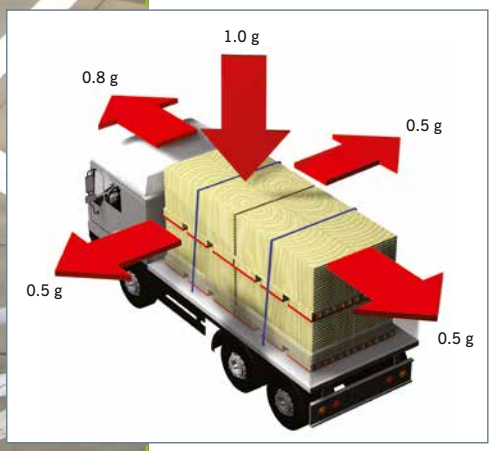
ErgoFloor®

Regupol®

Anti-Slip Mats

Perfect for securing loads in trucks, rail wagons, ships and planes.



BSW

ErgoFloor A/S, Viborgvej 42, 7160 Tørring, Tlf. 76 90 20 01, Email ergofloor@ergofloor.dk, Web: www.ergofloor.dk

www.regupol-easycargosec.eu

Regupol® 7210 LS plus

Regupol® 7210 LS plus is BSW's best-selling anti-slip mat. Offering good value for money, it is suitable for most average transports. **Regupol® 7210 LS plus** has proven its worth for many years and is used as the standard friction-increasing surface by many transport companies and shipping agents today.

Maximum loading
250 t/m² = 2.50 N/mm² when 8 mm thick

Sliding friction coefficient
Sheet 15 of Directive VDI 2700, defines the minimum requirements for anti-slip mats' friction coefficients. The **Regupol® Anti-Slip Mats** easily exceed these minimum requirements by 15-50 % depending on the friction elements. Because the given circumstances are hard to calculate in practice (moisture, soiled load floor), a value of 0.6 μ should be the base for calculations (which is also recommended by sheet 15 of VDI 2700).

In addition, the behaviour of **Regupol®** has been measured under paper coils in a road test and has been certified by DEKRA. Result: **Regupol®** is suitable as a component in the load securing variation described in VDI 2700 page 9.

BSW does not publish any generalised uncommented sliding friction coefficients. The sliding friction coefficient of a friction-increasing surface depends on the combination of materials involved, the temperature, the condition of the material surfaces and the anti-slip mat (soiling, moisture, etc.). The contact surfaces of load and floor must be swept clean, grease-free and dry to achieve optimum anti-slip properties.

Material
anti-slip mat based on SBR/NBR

Colour
black with green, light green and yellow colour particles

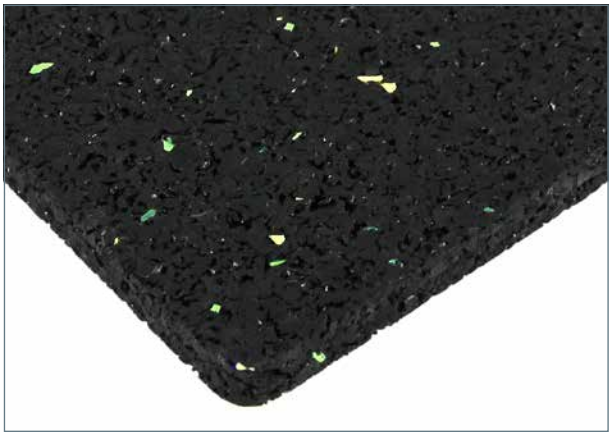
Surface weight
approx. 6.88 kg/m² when 8 mm thick

Bulk density
approx. 860 kg/m³

Tensile strength
at least 0.60 N/mm² in accordance with DIN EN ISO 1798

Elongation at break
at least 60% in accordance with
DIN EN ISO 1798

Temperature resistance
-40 °C to +120 °C



The green/light green/yellow colour marking is the distinguishing feature of the original **Regupol® 7210 LS plus** Anti-Slip Mat.

Discard status
Cracks, holes, crushing, after contact with oil, fuel, chemicals, etc. **Regupol® 7210 LS plus** Anti-Slip Mats are suitable for repeated use through to discard status pursuant to testing by VDZ Dortmund.

Resistance
UV light, sodium chloride, weak acids and alkaline solutions (swells up when exposed to hydrocarbons such as oil, fuel, etc.)

Cleaning
Shaking out, vacuuming, washing, possibly treating with a high-pressure cleaner

Disposal
Considering local regulations, can be deposited with domestic waste as per waste code 070299 according to European Waste Catalogue (EWC).

Delivery form
rolls, sheets, cuttings on request

Thicknesses
3 – 20 mm

On our website **www.regupol-load-securing.com** you will find anti-slip mats in sizes that BSW keeps in stock for quick delivery. These are cuttings from the anti-slip mat **Regupol® 7210 LS plus**.

BSW

www.regupol-easycargosec.eu

Regupol® 9510 RHS plus

Regupol® 9510 RHS plus can take higher loads than **Regupol® 7012 LS plus**. The maximum loading is 3.0 N/mm². It is used in many areas where conventional anti-slip mats based on SBR/NBR are not appropriate because of possible black discolouring.

Maximum loading
300 t/m² = 3.0 N/mm² when 8 mm thick

Sliding friction coefficient
Sheet 15 of Directive VDI 2700, define the minimum requirements for anti-slip mats' friction coefficients. The **Regupol® Anti-Slip Mats** easily exceed these minimum requirements by 15-50 % depending on the friction elements. Because the given circumstances are hard to calculate in practice (moisture, soiled load floor), a value of 0.6 μ should be the base for calculations (which is also recommended by sheet 15 of VDI 2700).

In addition, the behaviour of **Regupol®** has been measured under paper coils in a road test and has been certified by DEKRA. Result: **Regupol®** is suitable as a component in the load securing variation described in VDI 2700 page 9.

BSW does not publish any generalised uncommented sliding friction coefficients. The sliding friction coefficient of a friction-increasing surface depends on the combination of materials involved, the temperature, the condition of the material surfaces and the anti-slip mat (soiling, moisture, etc.). The contact surfaces of load and floor must be swept clean, grease-free and dry to achieve optimum anti-slip properties.

Material
anti-slip mat made of butyl rubber

Colour
multi-coloured

Surface weight
approx. 8.4 kg/m² when 8 mm thick

Bulk density
approx. 1,050 kg/m³

Tensile strength
at least 0.60 N/mm² in accordance with DIN EN ISO 1798

Elongation at break
at least 60% in accordance with DIN EN ISO 1798

Temperature resistance
-40 °C to +120 °C

The **Regupol® 9510 RHS plus** Anti-Slip Mat is made from butyl rubber.

Discard status
Cracks, holes, crushing, after contact with oil, fuel, chemicals, etc. **Regupol® 9510 RHS plus** Anti-Slip Mats are suitable for repeated use through to discard status pursuant to testing by VDZ Dortmund.

Resistance
UV light, sodium chloride, weak acids and alkaline solutions (swells up when exposed to hydrocarbons such as oil, fuel, etc.)

Cleaning
Shaking out, vacuuming, washing, possibly treating with a high-pressure cleaner

Disposal
Considering local regulations, can be deposited with domestic waste as per waste code 070299 according to European Waste Catalogue (EWC).

Delivery form
rolls, sheets, cuttings on request

Thicknesses
3 – 12 mm

www.regupol-easycargosec.eu

Regupol® 1000 LSE

Regupol® 1000 LSE is a premium product. The anti-slip mat is suitable for loading of up to 6.30 N/mm² and thus for heavy transports. In a widespread trial, the winter suitability of various anti-slip mats was tested by the TUL-LOG Institute Dresden in the BASt Federal Highway Research Institute.

Together with just one other mat, **Regupol® 1000 LSE** achieved sliding friction coefficients under winter conditions of more than 0.6μ, while being exposed to a sodium chloride brine to simulate melted snow and ice contaminated with gritting salt, at a temperature of -15°C. This result means that **Regupol® 1000 LSE** is probably the only anti-slip mat that is suitable for all kinds of transport right through to heavy loads under winter conditions.

Maximum loading
630 t/m² = 6.30 N/mm² when 8 mm thick

Sliding friction coefficient
Sheet 15 of Directive VDI 2700, define the minimum requirements for anti-slip mats' friction coefficients. The **Regupol® Anti-Slip Mats** easily exceed these minimum requirements by 15-50 % depending on the friction elements. Because the given circumstances are hard to calculate in practice (moisture, soiled load floor), a value of 0.6 μ should be the base for calculations (which is also recommended by sheet 15 of VDI 2700).

BSW does not publish any generalised uncommented sliding friction coefficients. The sliding friction coefficient of a friction-increasing surface depends on the combination of materials involved, the temperature, the condition of the material surfaces and the anti-slip mat (soiling, moisture, etc.). The contact surfaces of load and floor must be swept clean, grease-free and dry to achieve optimum anti-slip properties.

Material
anti-slip mat based on SBR/NBR

Colour
black with red particles

Surface weight
approx. 7.8 kg/m² when 8 mm thick

Bulk density
approx. 983 kg/m³

Tensile strength
at least 0.60 N/mm² in accordance with DIN EN ISO 1798

Elongation at break
at least 60% in accordance with DIN EN ISO 1798

The red colour marking is the distinguishing feature of the original **Regupol® 1000 LSE** Anti-Slip Mat.

Temperature resistance
-40°C to +120 °C

Discard status
Cracks, holes, crushing, after contact with oil, fuel, chemicals, etc. **Regupol® 1000 LSE** Anti-Slip Mats are suitable for repeated use through to discard status pursuant to testing by VDZ Dortmund.

Resistance
UV light, sodium chloride, weak acids and alkaline solutions (swells up when exposed to hydrocarbons such as oil, fuel, etc.)

Cleaning
Shaking out, vacuuming, washing, possibly treating with a high-pressure cleaner

Disposal
Considering local regulations, can be deposited with domestic waste as per waste code 070299 according to European Waste Catalogue (EWC).

Delivery form
rolls, sheets, cuttings on request

Thicknesses
from 8 mm

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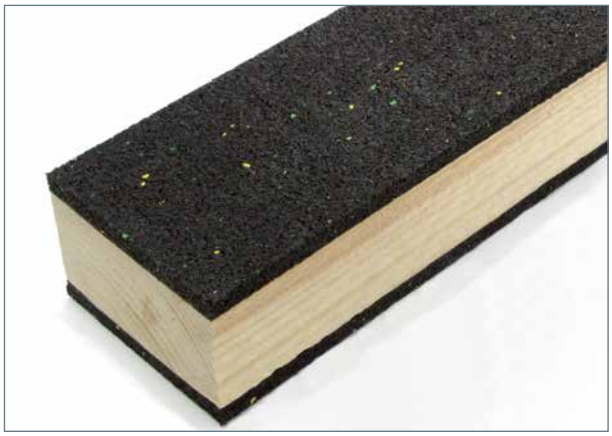
Regupol® RHM Squared Timber

Regupol® Squared Timbers are friction-increasing surfaces used for securing all kinds of general cargo that cannot be palletised and that are loaded by forklift truck or crane. The squared timbers act as spacers for positioning the forks or crane clamps when loading and unloading. They are fitted with **Regupol® Anti-Slip Mats** on the top and bottom longitudinal side to give them a friction-increasing effect. The **Regupol® Anti-Slip Mats** are firmly joined to the timber to prevent any displacement between mat and timber during loading processes. The squared timbers have a narrow right-angled cross-section to prevent them rolling.



Application
Under precast concrete parts, loose pipes, pipe packages, steel girders, reinforcing steel mesh and other general cargo that cannot be palletised

Maximum loading of **Regupol®** 7210 LS plus
250 t/m² = 2.50 N/mm² when 8 mm thick

Sliding friction coefficient
see page 3 for **Regupol®** 7210 LS plus.

Material
anti-slip mat based on SBR/NBR

Colour
black with green, light green and yellow colour particles

Weight **Regupol®** RHM Squared Timber
approx. 10 kg

Temperature resistance of **Regupol®** 7210 LS plus
-40 °C to +120 °C

Discard status
Cracks, holes, crushing, after contact with oil, fuel, chemicals, etc. **Regupol® 7210 LS plus** Anti-Slip Mats are suitable for repeated use through to discard status pursuant to testing by VDZ Dortmund.

Resistance
UV light, sodium chloride, weak acids and alkaline solutions (swells up when exposed to hydrocarbons such as oil, fuel, etc.)

Cleaning
Vacuuming, washing, possibly treating with a high-pressure cleaner

Disposal
Considering legal regulations, can be deposited with residual waste as per waste code 200301 according to European Waste Catalogue (EWC) without difficulty.

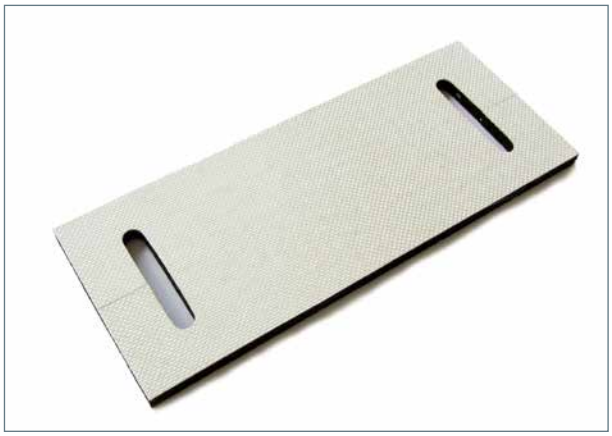
Delivery form
quantities as required

Thicknesses
Squared timber: 2,380 x 100 x 60 mm

Regupol® Anti-Slip Mat
2,380 x 100 x 8 mm
Other dimensions possible on request

Regupol® Webbing Protectors

Regupol® Webbing Protectors safeguard lashing straps from premature wear and tear caused by sharp edges, and protect breakable loads from damage. **Regupol® Webbing Protectors** ensure that the lashing strap slides across the load on both edges when being lashed and that the lashing capacity of the belt is evenly distributed. Their underside consists of robust, anti-slip **Regupol®** material, and their upper side of a special fabric layer.



Material
Robust, friction-enhancing and pressure-resistant **Regupol®** anti-slip material with a special fabric on the upper side.

Disposal
Considering legal regulations, can be deposited with residual waste as per waste code 200301 according to European Waste Catalogue (EWC) without difficulty.

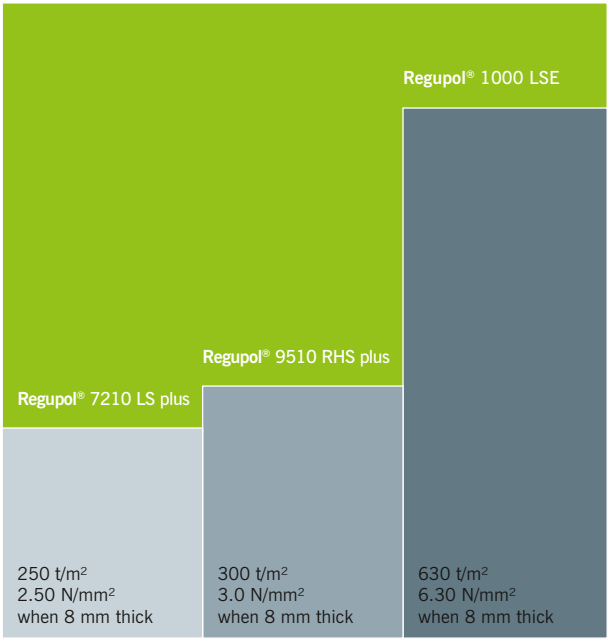
Advantages
- Fast, simple fixing
- No threading of the lash required
- Rear side original **Regupol® Anti-Slip Mats**
- Improvement of the transfer coefficient K
- Flexible and optimally adaptable for all lashes

The underside of the **Regupol® Webbing Protectors** consists of robust, anti-slip **Regupol®** material.

Regupol® Webbing Protectors can be fitted in just a few moves.

Maximum loading

The choice of suitable anti-slip mat depends on the expected maximum loading. This diagram gives an overview of the maximum loading for the three **Regupol®** Anti-Slip Mats.



According to VDI 2700, sheet 15, the maximum loading of anti-slip mats is selected so as not to exceed a deformation of 30% of the material thickness.

Regupol® Anti-Slip Mats are tested by:

TÜV NORD Group (TÜV - technical inspection agency)

BIA Berufsgenossenschaftliches Institut für Arbeitsschutz

Institute for Occupational Safety and Health of the German Social Accident Insurance

vdz GmbH Verpackungstechnisches Dienstleistungszentrum

DB Deutsche Bahn AG

German national railway company

Fraunhofer IML Institut Materialfluss und Logistik

Fraunhofer Institute for Material Flow and Logistics (IML)

DEKRA

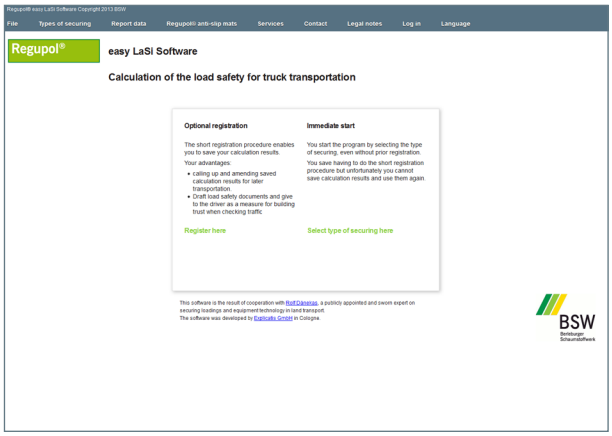
TUL LOG

IfV

www.regupol-easycargosec.eu

Regupol® easy LaSi Software

Regupol® easy LaSi Software is freely accessible software for calculating loading safety. The new software includes four loading safety methods, for calculating and documenting the result quickly and straightforwardly. The software is free to use and can be accessed via the website: **www.regupol-easycargosec.eu**. It is not necessary to download the software, the user can enter the data required directly on the interactive website and the result will appear immediately. **Regupol® easy LaSi Software** is currently available in German, English, French, Polish, Czech, Danish, Hungarian and Italian. Further language versions will follow in the future.

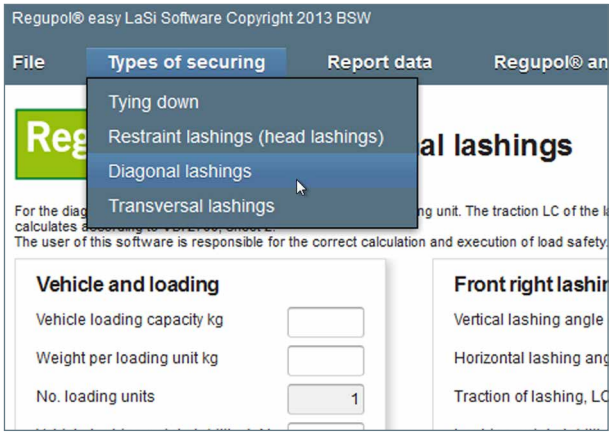


The homepage for **Regupol® easy LaSi Software** is www.regupol-easycargosec.eu. There is no need to download the software.

The four loading safety measures

Regupol® easy LaSi Software calculates the following safety measures:

- Lashing down with or without form locking
- Restraint lashings combined with side lashing
- Diagonal lashing
- Transversal lashing



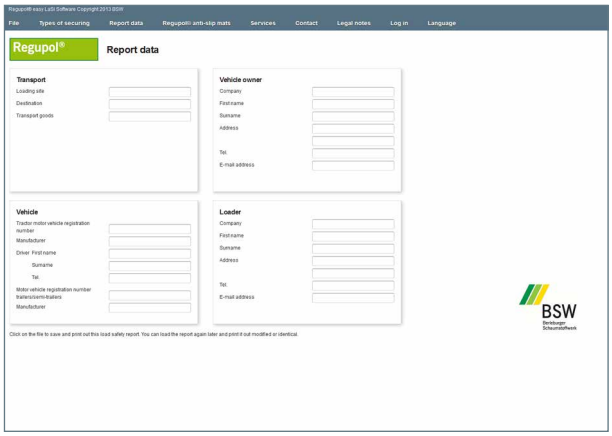
The four loading safety measures in the software.

Calculation results

The software either confirms the correctness of the load safety or formulates warning notes and correctional recommendations for inadequate safety measures. The calculation results can be saved and printed out in the form of a report, which serves as working instructions for those responsible for loading safety, and as a back-up document for traffic checks for the driver.

The individual calculation results can be saved, along with the associated report, and can be called up again and quickly updated or modified for the same or similar transports.

The correctness of the calculated results has been monitored and confirmed by an independent appraiser.



The software report data.

Regupol® easy LaSi Card

The **Regupol® easy LaSi card** calculates two methods for securing stable loading units with **Regupol® Anti-Slip Mats**:

– The tie-down lashing procedure
– The diagonal lashing procedure

With just a few manipulations, the number or traction of lashing belts required can be recorded quickly and straightforwardly. Moreover, the **Regupol® easy LaSi** is fitted with a lashing protractor so that it is also easy to identify the angle of the lashing belt. Structured graphs summarising the maximum loading for **Regupol® Anti-Slip Mats** help determine the optimum size and thickness to be applied for the best possible securing of the load. The handy format and simple description means you can take the card with you anywhere and it can be used independently by anyone.

Detailed view of the **Regupol® easy LaSi Card**.

Technical advice is free

The card is available from BSW upon request.

www.regupol-load-securing.com

Product pass

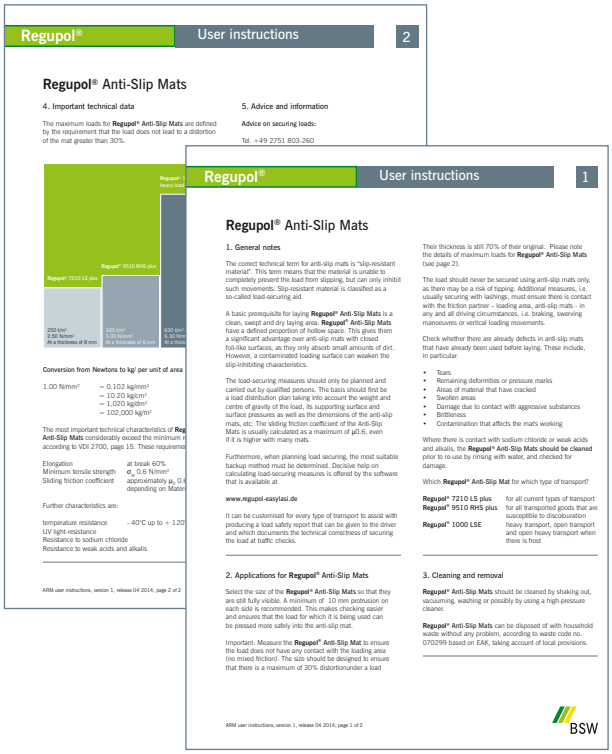
On request, BSW sends all customers the Product Passes for **Regupol® Anti-Slip Mats**. They verify that the used anti-slip mats are genuine (colour quality code) and indicate the main technical details. The driver should keep the Product Pass in the vehicle at all times and present it at any traffic checks.

The Product Passes can also be downloaded at our website **www.regupol-load-securing.com**.

In conjunction with the loading safety reports from **Regupol® easy LaSi Software** available at **www.regupol-easycargosec.eu**, any driver whose load is secured using **Regupol® Anti-Slip Mats**, has the documents to prove that all necessary securing measures have been met.

Usage instructions

BSW provides all customers with instructions for the correct use of **Regupol® Anti-Slip Mats**. Besides important general notes, they describe which criteria and measures are to be considered when selecting and using **Regupol® Anti-Slip Mats**. It also provides information on care and cleaning as well as technical data. You will find detailed usage instructions available to download on our website: **www.regupol-load-securing.com**



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www.regupol-load-securing.com

Training documents

BSW provides information folders with training documents for driving schools and training courses:

- easy LaSi card
- Loading safety manual
- Various product samples
- Product information
- Business cards

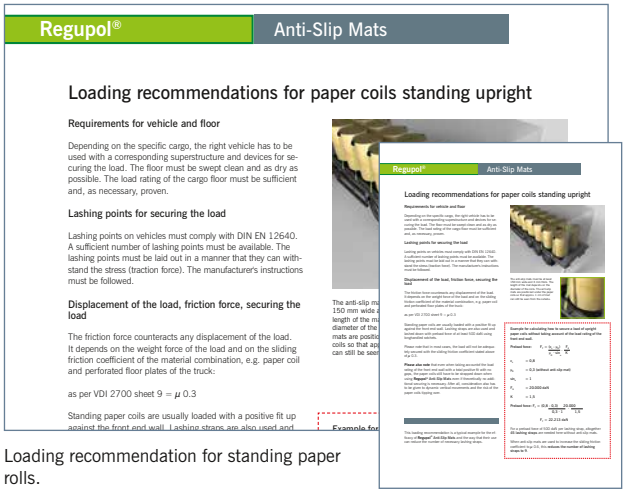
Training documents for driving schools.

Loading recommendation

On the website **www.regupol-load-securing.com** BSW offers downloads of the four loading recommendations for the following products:

- Loading recommendation for standing paper rolls
- Loading recommendation for steel pipes and rods
- Loading recommendations for coils or split strips on pallets or free-standing
- Loading recommendation for coils or composites in a coil trough

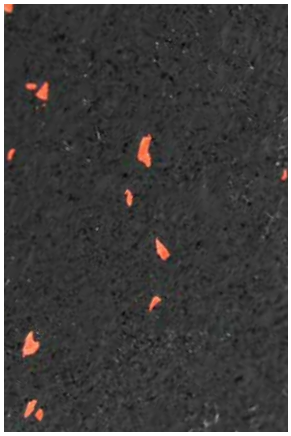
These recommendations on various types of loading describe, for example, the requirements regarding vehicle and loading surface for loading safety, the frictional force, etc. Images, illustrations and calculation examples convey further information.



Loading recommendation for standing paper rolls.

Quality features

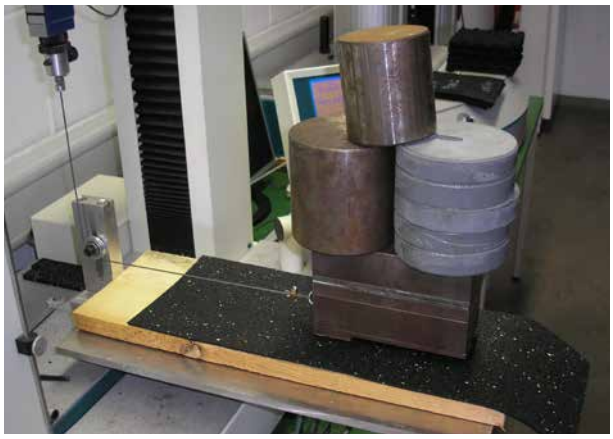
Regupol® Anti-Slip Mats are colour coded. The distinctive (and legally protected) yellow and green or red particles distinguish genuine **Regupol® Anti-Slip Mats**. Mistakes (genuine or otherwise) in supply are thus avoided. Only original **Regupol® Anti-Slip Mats** possess these colour codings. **Regupol® Anti-Slip Mats** consist of rubber fibres. They are ideal particularly for heavy loads, sharp edged cargo, transporting paper, steel sheets, chipboards, reinforcing steel mesh and all palletised loads. The special advantage of **Regupol® Anti-Slip Mat**s with their highly porous structure consists in absorbing soiling and moisture etc. from the floor. In contrast to anti-slip films and similar materials with a smooth surface, it therefore prevents any notable loss in sliding friction coefficient. **Regupol® Anti-Slip Mats** are suitable for repeated use.

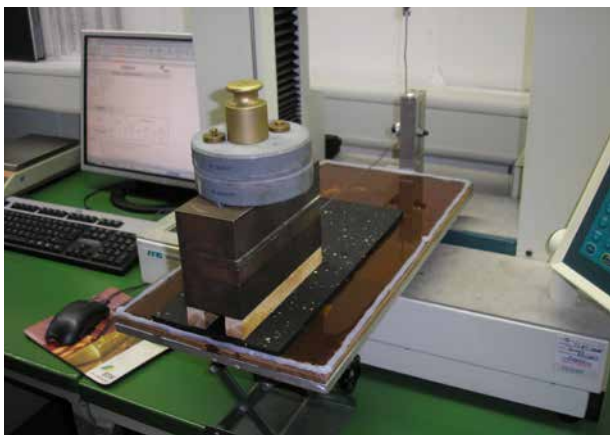


Colour coding of the original: Left: **Regupol® 7210 LS plus**, green-light green-yellow. Right: **Regupol® 1000 LSE**, red.

Testing the material combination

Every material combination, i.e. floor, anti-slip mat and the load resting on it, generates other sliding friction coefficients with a friction-increasing surface. **Regupol® Anti-Slip Mat** values are available for common material combinations. Furthermore, using a laboratory test, we offer to determine the sliding friction coefficients of the **Regupol® Anti-Slip Mats** selected by our clients in other material combinations.





The sliding friction coefficient of the **Regupol® Anti-Slip Mats**, with the respective material combinations, will be determined in our own laboratory (above and below).

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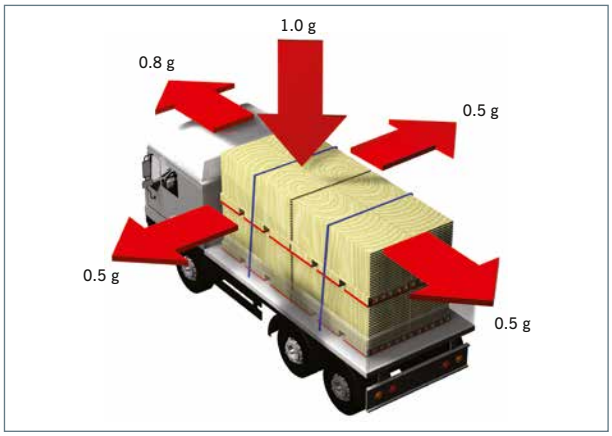
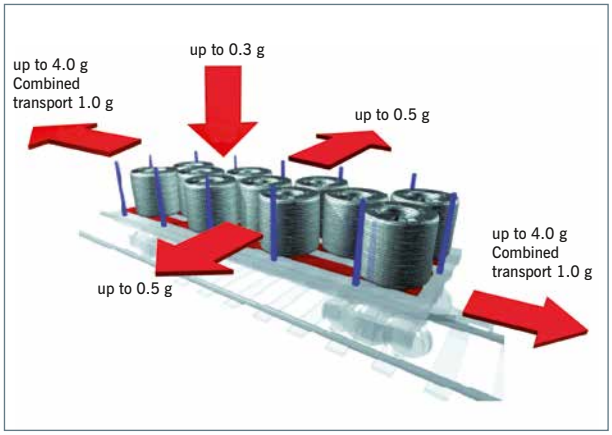
Forces under Various Movements

1.0 G indicates the weight of loads. According to this, forces achieve up to 80% of the stated value due to various movements by means of transportation.

Inasmuch as friction force and securing force are acting together against cargo slippage, **Regupol® Anti-Slip Mats** are furthermore able to increase the friction force. Excellent anti-slip mats ensure at least 60% of load securing. However, tie-downs and similar fixing equipment must not be forgotten.

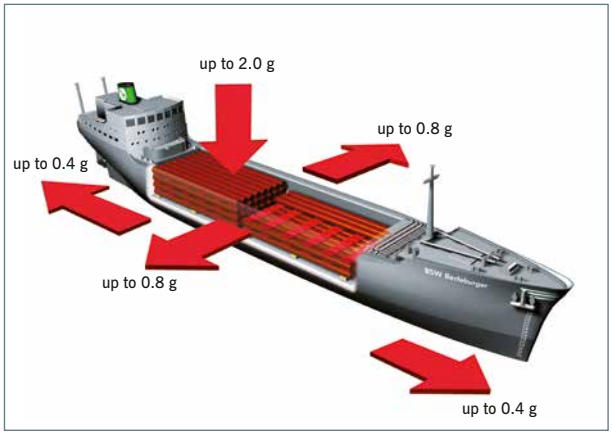


80% of load weight has to be compensated for load securing during driving manoeuvres of trucks.



Extreme forces are generated during rail transport: load securing must withstand four times the load weight.

Correct load securing: anti-slip mats are coloured red.



In ship transportation, these forces are doubled for the same loading weight.

Acceleration forces during transport

The dangers resulting from incorrectly secured loads are frequently underestimated. The acceleration forces under normal traffic conditions reach levels approaching the actual weight of the load. The friction force F_F of an anti-slip mat therefore counteracts any displacement of the load and is described in physical terms as follows:

F_F = μ x F_G (friction force)

F_G = weight

μ = sliding friction coefficient

m = mass

g = gravitational acceleration

F_G = m x g

The difference between inertia force F_M and friction force F_F is known as securing force F_R:

$F_R = F_{x,y} - F_F$

The securing force F_R is the force that the securing equipment has to absorb in a forwards direction.

Loads are secured correctly by achieving a balance between the opposing forces occurring during transport.

The loads are adequately secured when the sum of the friction force F_F and the securing force F_R is at least as large as the inertia force F_M.

The friction force is increased by anti-slip mats, the securing force by lashing straps and other equipment.

As the weight acting in a forwards direction when the truck brakes can reach up to 80% of the load weight (0.8 g), the load must be secured accordingly.

Load securing
= friction force + securing force

The load only has to be secured for normal driving, not for a traffic accident. Normal driving also includes emergency braking, drastic avoidance manoeuvres and poor road surfaces.

The following forces can occur in normal driving:

- maximum 0.8 g in the direction of travel, corresponding to 80% of the load weight
- maximum 0.5 g to the sides, corresponding to 50% of the load weight
- maximum 0.5 g to the rear, corresponding to 50% of the load weight

Example
ascertaining the preload force with and without anti-slip mats

Preload force: $F_T = \frac{(c_x - \mu_D)}{\mu_D \cdot \sin_\alpha} \cdot \frac{F_G}{K}$

c_x = 0,8

μ_D = 0,2 (without anti-slip mat)

$\sin_\alpha$ = 1

F_G = 10.000 daN

K = 1,5

Preload force: $F_T = \frac{(0,8 - 0,2)}{0,2 \cdot 1} \cdot \frac{10.000}{1,5}$

F_T = 19.999,98 daN

For a preload force of 500 daN per lashing strap, altogether **40 lashing straps** are needed here without anti-slip mats.

When anti-slip mats are used to increase the sliding friction coefficient to μ 0.6, this **reduces the number of lashing straps to 5**.

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Cost savings with Anti-Slip Mats

Example: For a load of 7500 kg standing freely on the loading platform (chipboard floor, coefficient of sliding friction approx. μ 0.3) at 10 truckloads per day / 240 transports per year.

For a pre-tension force of 500 daN per lashing strap, **17 lashing straps** are required when no anti-slip mats are used.

The use of anti-slip mats doubles the coefficient of sliding friction to μ 0.6 and reduces the number of straps required to **4**.

Savings by using Anti-Slip Mats:

approx. 32 000 euros per year.

Comparative calculations

Costs **without** Anti-Slip Mats

34 lashing straps
(17 per transport x 2 purchases per year)
= 340 euros : 240 days = 1.42 euros per transport **1.42**

Pre-tension per belt 2 minutes
= for 17 belts 34 minutes per transport
at 35 euros per hour salary costs
= 19.83 euros per transport **19.83**

34 edge protection brackets x 2 per year
= 68 brackets
= 68 euros per year : 240 days
= 0.28 euros per transport **0.28**

Costs per transport		21.53
x 10 transports per day	=	215.30
x 240 days	=	51 672
		euros per year

Costs **with** Anti-Slip Mats

8 lashing straps
(4 per transport x 2 purchases per year)
= 80 euros : 240 days = 0.33 euros per transport **0.33**

Anti-slip mats
= 10 euros per truck for an average of 4 transports
= 2.50 euros per transport **2.50**

Positioning the anti-slip mats 1 minute per transport
at 35 euros per hour salary costs
= 0.60 euros **0.60**

Pre-tensioning per belt 2 minutes
= for 4 belts 8 minutes per transport
at 35 euros per hour salary costs
= 4.67 euros per transport **4.67**

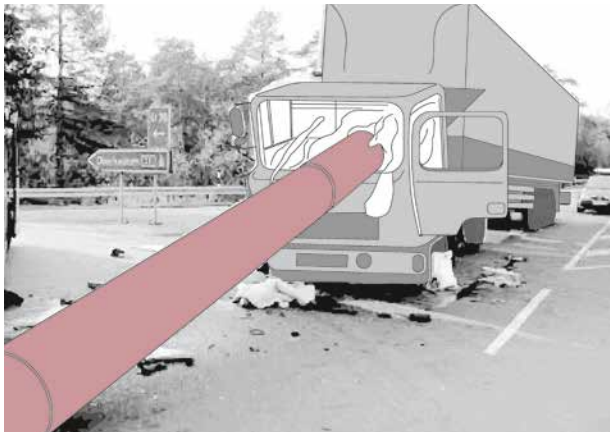
8 edge protection brackets x 2 per year
= 16 brackets
= 16 euros per year : 240 days
= 0.07 euros per transport **0.07**

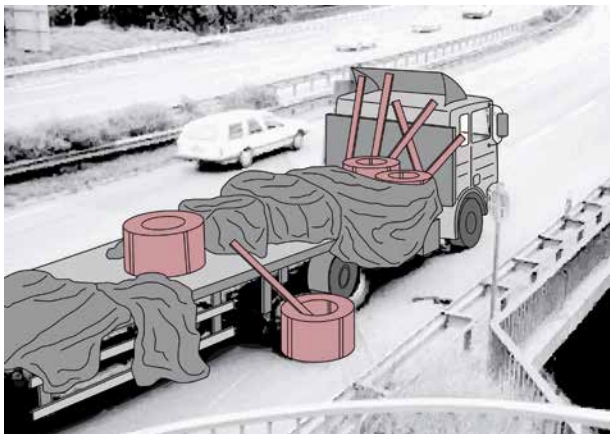
Costs per transport		8.17
x 10 transports per day	=	81.70
x 240 days	=	19 608
		euros per year

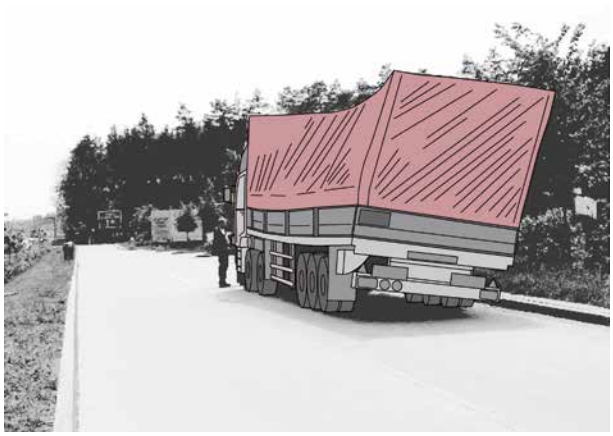
Consequences of Securing Cargo Incorrectly

When goods are being transported, acceleration and braking together with lateral centrifugal force or vibration generate forces approaching the actual weight of the load. As a result, the load can slip and cause severe damage to property as well as accidents with casualties.

For example, the load can break through the front wall of a truck and cause severe injury to the driver. Dangers are also involved in unloading loads which have slipped. Frequently the load also falls from the vehicle and causes a hazard to other road users. Incorrectly secured loads are often also damaged themselves. In Germany alone, this results in load damages amounting to several hundred million euros a year. Incorrectly secured loads are estimated to cause approx. 20% of all accidents in heavy goods traffic.







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Legal foundations

Article 22 (1) German Road Traffic Regulations
The equipment for securing the load and loading devices are to be stowed and secured so that they cannot slide, fall over, roll backwards, fall down or cause avoidable noise even dur-ing emergency braking or sudden evasive action, in compliance with state-of-the-art technology.

Article 23 German Road Traffic Regulations
The vehicles's driver is responsible for ensuring that his vision is not impaired […] by the […] load, equipment or condition of the vehicle. He must ensure that the vehicle, train or towing combination and the load are in full compliance with the regulations and that the load does not jeopardise the vehicle's roadworthiness.

Article 31 (2) German Road Traffic Regulations
The owner must not order or permit the vehicle to be used if he knows or must know that the load is not correct or that the roadworthiness of the vehicle is jeopardised by the load or occupancy.

An entrepreneur is therefore already in violation of the German Road Traffic Licensing Regulations by failing to use a vehicle with the necessary equipment for adequately securing the load.

Article 412 (1) German Civil Code
Unless indicated otherwise by circumstances or traffic customs, the consignor shall load, stow, fasten and unload the goods in a manner safe for transport. The haulage contractor shall ensure that the load is safe for operations.

Civil Law: German Commercial Code (HGB)

Consignor

According to Article 412 German Commercial Code, the consignor is responsible for loading the goods in a manner safe for transport

Haulage Contractor

According to Article 412 German Commercial Code, the haulage contractor is responsible for loading the goods in a manner safe for operation.

Public Law: German Road Traffic Regulations, German Road Traffic Licensing Regulations

Loader, Driver

According to Article 22 German Road Traffic Regulations, loader and driver are obliged to secure the load.

Vehicle Owner

According to Article 31 Road Traffic Licensing Regula-tions, the vehicle's owner is obliged to equip the vehicle.

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