



SAFETY DATA SHEET AND PROCESSING

I. MATERIAL- / PREPARATION AND COMPANY NAME

INFORMATIN ABOUT THE MANUFACTURER

Manufacturer:	Paul Gröne GmbH
Street:	Alter Mühlenweg 3
Postcode / City:	D-49413 Dinklage
Telephone:	+49 4443 3347
Telefax:	+49 4443 3754
e-Mail:	info@groene-gmbh.de
Web:	www.groene-gmbh.de

PRODUCT INFORMATION

Trade name:	Rubber screed G2000 Flooring for horse and cattle
-------------	--

INTENDED USE

Universal use for stables, veterinary clinics, trailer floors, stud farms etc.

Consumption of material = 1 container = 50 kg = 2,25 m²

Minimum thickness: 15 mm depending on the application

(please inquire at **Gröne** +49 4443 3347 erfragen)

Normal Thickness: 20 mm (22 kg/m²)

Trailer 15 mm thickness (1,5 Pack / ca. 4,5 m²), truck 20 mm (1 Pack / ca. 2,25 m²)

PROCESSING INFORMATION

- pour latex liquid in 90 litre round bucket and stir mind. 80 mm with compulsory mixer or a mixer, PE bag needs to be completely empty because of the color additive in the lower part of the bag.
- add small bag with setting powder while stirring
- add contents of Big black bag up to ca. 1 - 2 kg and quickly stir well, (if the mixture is too thin, pour in the rest of the granules)



Natural latex can always be a little thicker or thinner in consistency, it depends on the harvest time, so you should not immediately mix in all of the filler (granules), but select the desired consistency during mixing. (Advantage for heat or drafts, advantage for laying beginners).

The mixture is ready when there are no lumps or clumps to see, please do not mix too long (drying phase begins), max. 1 - 2 min. stirring time. Avoid drafts and direct sunlight during mixing and processing.

Divide mixture into small heaps and spread with a trowel, use a smoothing spatula for closing the pores with light pressure. Clean tools continuously with water and dry before use.

Hardening time: 72 hours.

Installation instructions are located under „Services“ on www.groene-gmbh.de.

SHELF LIFE

6 months

Storage temperature: 5 - 20 °C

Installation temperature 5 - 20 °C

protect from frost and moisture

SUBSURFACE

- wood panels need to be sanded and vacuumed before.
Screed can be directly coated after 100% cleaning; must be at least 4 weeks old.
- Concrete needs shot blasting or milling, then cleaning with industrial vacuum cleaner.
waterproof concrete shot blasting only. Recommended concrete B25. (Concrete must be at least 8 weeks old.)
- Dry concrete pavement can be directly coated after 100% cleaning.

Please always avoid rising dampness, the building underconstruction site must be ensured. Aluminum substrates, see page 5!



PLEASE NOTE

Since the flooring is made of natural products, can cause efflorescence.

- hoof prints in the surface can be caused by the squeezing of the bloated upper layer of latex and is important for the high stability of the horse, but these are superimposed and later only partially visible.
- Small cracks are possible in sunlight or drafts during installation.
- Due to the hand laying of the floor, trowel marks are visible on the surface, this leads to slight differences in height.
- Horses with studs or sharp horseshoe nails can damage the lining in pawing, if a hole is created, immediately repaired with repair kit from Gröne, since the penetration of water must be prevented.

We recommend for areas from 100 m² always create a customer approved sample surface, also sample surfaces for old floors or other surfaces.

Information for veterinary clinics: paraffin oil dissolves the surface of the rubber pad, please remove thoroughly and immediately after application, drip hoses not be true to the rubber.

CRACK INFORMATION

Problem

Wooden planks, which are easily encountered, work very hard, the rubber can not bridge this gap formation, it can lead to cracking.

Solution

Use tongue and groove boards and cut open joints and seal with *Sika TF Bonds Plus Stick and Seal*, this is a maintenance joint.

Problem

Expansion joints and contraction joints in concrete and screed work depending on the nature and environment of the substrate, they can, depending on the load, lead to cracking.

Solution

Install expansion elements or profiles, joints and cut with *Sika TF Bonds Plus Stick and Seal*, this is a maintenance joint.

Problem

Installation on warm substrates (25 - 40 °C, or beyond), the material is installed and cools sharply at night, for example, it is not yet fully hardened and contracts by cooling down, cracking possible.

Solution

Avoid the installation under these conditions or cut joints and seal with *Sika TF Bonds Plus Stick and Seal*.

Problem

Installation under room temperature (13 - 17 °C) in winter, for example, a trailer is moved outdoors, the next morning, outside it's very cool (-1°C and colder) not yet fully hardened the surface, the hardening process is disturbed or stopped, the material shrinks from the cold, cracking can occur.

Solution

Allow screed to fully harden in the trailer for at least three days at room temperature or cut joints and seal with *Sika TF Bonds Plus Stick and Seals*.

Problem

Transitions from very thick to thinner coatings (3 - 5 cm to 1 - 2 cm thickness), when the surface hardens it comes to shrinking that can be very different depending on the thickness, cracking can occur.

Solution

Build thicker materials in several layers or cut joints and seal with *Sika TF Bonds Plus Stick and Seal*.

Problem

Slight hairline cracks in the surface are possible in direct sunlight and drafts, the surface dries too quickly, the ground is not hardening quickly enough, cracking possible.

Solution

Close gates and doors, avoid drafts and direct sunlight or cut joints and seal with *Sika TF Bonds Plus Stick and Seal*.

HEAT AND COLD

After the installation of rubber flooring G2000 below room temperature (+ 5 - 20 °C), it is imperative to comply with the hardening time of three days, that means, the finished coating needs to be protected against heat or frost in summer as well as in winter.



INTENDED/RECOMMENDED CLEANING

- rubber surface with pH neutral, solvent-free cleansing agents, eg. "Universalseife pH 7"
- in the case of lime efflorescence , surface can be cleaned with lime scale or hydrochloric acid diluted with water, always test the cleaner on a inconspicuous place of the surface
- high pressure cleaner can be used up to 80bar, safety distance to the surface minimum 30 cm

RUBBER FLOOR ON ALUMINIUM SUBSTRATES

- acetone or aluminum cleaner can be used residue-free (prevent shot blasting and sanding!)
- pH tolerance of aluminum: 5 - 8
rubber flooring has pH of 9 -11 (lye/alkali reaction)

Required: Cover the entire surface very thoroughly with contact adhesive and potentially sprinkle the fresh adhesive with quartz. Let glue dry completely (3 - 6 hrs.) and then start with the coating.

Not suitable for aluminum checker plate, use only aluminum boards.

Because of the variety of aluminum compounds on the market, samples should be made to test and verify liability before the installation process.

A guarantee for the substrate adhesion of the rubber floor screed G2000 on aluminum surfaces can not be given.

PROCESSING INFORMATION

- apply thin ca. 8 -10 mm rubber floor in the first coating process
let it dry one day
- apply rubber floor in the second coating process apply residual strength (+10 -15 mm) to get desired thickness.

If it comes to blistering after the first coating process, you should remove these bubbles prime again the and fill with the second coating.



ADDITION TO ALUMINUM PRIMER

Warning: The joining times indicated on the adhesive can relate to rubber bonding, are however, not valid for the connection of liquid rubber screed and aluminium. The exact chemical treatise can be requested from us.

II. COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL CHARACTERISATION

Natural latex with colouring-agent

Description:

A watery rubber dispersion, stabilized with potassium hydroxide, vaporised ca. 61% - 71%, coagulum content ca. 1%, Ammonia content < 1%

DANGEROUS INGREDIENTS

CAS-No.	Substance name	Risk and Safety
1336 - 21 - 6	Ammonia solution	R34, R37
1310 - 58 - 9	potassium hydroxide	R35

POTENTIAL HAZARDS / INDICATION OF DANGER

The product is **not** covered by the GefStoff / EC Directive 88/379 EEC and is not subject to labelling.

FIRST-AID MEASURES

No special measures necessary

INFORMATION ABOUT TOXICOLOGY

Primary irritant effect on skin / protection:	none / not applicable
Primary irritant effect in the eye / protection:	none / not applicable



PHYSICAL AND CHEMICAL PROPERTIES

Form:	liquid
Colour:	milky white
Smell:	like Ammoniak
Change of state:	melting temperature ca. 0°C (water) boiling temperature ca. 100°C (water)
Flash point:	n.a.
Flammibility:	n.a.
Ignition temperature:	n.a.
Spontaneous ignition:	n.a.
Oxidising properties:	n.a.
Risk of explosion:	explosion limits: lower: n.a. upper: n.a.
Steam pressure:	30 mbar (20 °C)
Density:	1,0 g/cm ³ (20 °C)
Bulk density:	not data available
Water solubility:	not soluble in water, but can be mixed with water in any ratio in (°C) g / l (at g / l H ₂ O) (20 °C) 9 - 11
pH value:	(at g / l H ₂ O) (20 °C) 9 - 11
Partition coefficient n-Octanol / water:	log Po / w: n.a.
Viscosity:	Ford Cup No. 3 ca. 30 - 40 sec (30 °C)

III. TRADE NAME

CHEMICAL COMPOSITION

Rubber granulate, black

Description:

Vulcanized mixture of rubber, inorganic fillers and plasticizers

PHYSICAL DATA

Condition at 20°C:	firm
Melting point:	Vulcanizate



Density:	1,2g/cm ³
Flashpoint:	ca. 230°C
Solubility:	not soluble in water, swellable in inorg. solvents

TOXICOLOGICAL DATA

Primary irritant effect on the skin / protection:	none / not applicable
Primary irritant effect to the eye / protection:	none / not applicable
Precautionary measures:	no particular hazards during transportation, storage and processing

IV. PRODUCT NAME

CHEMICAL COMPOSITION

Hardener

Description:

Inorganic hydraulic binder compositions based on molten or sintered Calciumaluminatclinker. The main chemical components are Al₂O₃, CaO, SiO₂, Fe₂O₃.

DANGEROUS INGREDIENTS

Declaration and classification of components according to the Commission of the European Community Directive 91/155 / EEC and 93/21 / EEC instructions:

Description	Classification	Indication of danger
Aluminates	none	none

PHYSICAL AND CHEMICAL PROPERTIES

Physical condition:	solid
Form:	fine powder



Colour:	grey
Smell:	none
pH value:	11 - 11,5 (10 % dispersion in Water)
Melting point:	1270 - 1440 °C
Ignition temperature:	n.a.
Explosive:	n.a.
Properties:	n.a.
Density:	3200 kg/m ³
Solubility:	≤2‰ soluble components
Bulk density:	800 - 1300 kg/m ³

V. AUDIT REPORT FINISHED PRODUCT RUBBER SCREED G2000

Bavarian State Institute of Agricultural Engineering
Nr.07/89 Thermal conductivity according to DIN 52616

Sample mean temperature (in °C):	Thermal conductivity (in W(mK)):
11,1	0,12
16,2	0,12
20,2	0,12

VI. TEST CERTIFICATE NO.: 960195 - GO/LI

Official Materials Testing Institute for Building
DIN 1048 Part 5, Section 7.6 Water penetration



PLEASE NOTE

The information in this leaflet is based on careful research, from our suppliers and many years of experience in practice. They are none-binding, which is also generally our technical advice orally, in writing and by tests, since we can not assume any liability because of the versatility of processing and application, also applies to the proprietary rights of third parties. Analysis of data and other information on the quality and suitability of our products are non-binding outline details, unless they are explicitly guaranteed in writing, and shall in particular not warrant any specific properties.

We recommend that you check by sufficient tests the suitability of our products for their particular application.

We point out that the stability of the building underconstruction must be ensured on site (restriction of the VOB). The warranty does not include the mechanical wear and tear caused by horseshoes, nails and studs.

FIRE PROTECTION CLASS

A	Fires involving solid materials, mainly organic in nature, normally with a glow.	wood, coal, paper, textiles, tires, some plastics, straw	water, aqueous solutions, foam, ABC powder
---	--	--	--

PAUL GRÖNE GMBH

Alter Mühlenweg 3
 49413 Dinklage
 Germany
info@groene-gmbh.de
www.groene-gmbh.de
 Tel: +49 4443 3347
 Fax: +49 4443 3754