

KGS Adhesives Catalogue

2013





KGS Adhesives

There are many different applications for bonding materials together. Each bonding application must be carefully analyzed to select the correct working method and adhesive.

Choosing the correct adhesive involves:

- Understanding the materials to be bonded together
- Understanding the strength required for the bond
- Understanding the environment, temperature, lifetime expectancy, stress, among other factors

In many cases, it is important to study published standards regarding the safe bonding of materials.

KGS has clearly defined a specific group of adhesives with “high performance” characteristics specially designed for the industrial stone market.

KGS has developed these adhesives through intensive research and working with leading manufacturers of stone products. KGS adhesives meet the demanding requirements of today’s fast paced and highly specialized production.

KGS has a team of experts ready to answer any question regarding your adhesive requirements...





Construction Adhesive

KGS PU Construction Adhesives and Accessories

High performance construction adhesive:

Based on high adhesion power, the KGS PU range is perfectly suitable for the adhesion of stiffening profiles. Through the use of a 2-component adhesive, which is applied with tubes, to make correct mixing quick and easy.

Advantages:

- Fast curing
Glued object can be handled after 30 minutes if glued with KGS PU 1001 and 15 minutes if glued with KGS PU 2001.
- Cures solid – shore hardness 85 D.
- High shear resistance on GRP, stone, aluminium.
- Temperature resistance up to 110°C.
- For both inside and outside.
- No skimming
- No pressing
- No shrinkage

Products

KGS PU 1001 in 2 x 310 ml - 8711.10066 white

KGS PU 1011 in 2 x 310 ml - 8711.10067 black

KGS PU 2001 in 2 x 310 ml - 8901.10031 white

Mixer tip 2 x 310 ml - 8901.10032

Accessories

Glue gun for 2 x 310 ml - 8711.10060

Air pressure gun for 2 x 310 ml - 8711.10055





Construction Adhesive

KGS PU Construction Adhesives and Accessories

For small gluing jobs on location, perfectly suited for installation teams, the KGS PU 1001 is also available in small tubes. This allows also gluing in places with poor access.

Products

KGS PU 1001 in 2 x 25 ml - 8711.10054



Accessories

Mixer tip for 2 x 25 ml - 8711.10059

Glue gun for 2 x 25 ml - 8711.10085





Surface Adhesive

KGS PU 5100/805

2 Component adhesive on Polyurethane base

KGS PU 5100/805 is a 2-component surface adhesive on polyurethane base for a very strong adhesion of slabs of different materials. The adhesive will keep a high level of flexibility after curing to allow for linear expansion.

Highly suitable for gluing ceramic slabs.
Hardness in shore: 50 D
Long processing time of around 80 min.
Material can be processed after 6 hours.

Products

KGS PU 5100/805 - 8711.10079

To avoid mixing mistakes both components should be totally mixed in a binder bucket with a mixing paddle.





Surface Adhesive

KGS E 4000

2-Component adhesive on epoxy base

KGS E 4000 is a 2-component surface adhesive on an epoxy base for the stiff adhesion of natural stone and composites. Transparent and UV stable, it is suitable for gluing of stones with visible joints.

For inside and outside use.

Hardness in shore: 85 D

Processing time: 20-30 min.

Material can be handled after 6-8 hours

Curing time: 24 hours

Mixing ratio 2:1 (100:51 in weight)

Products

KGS E 4000 A/B 3,5 + 1,8 kg - 8711.10091

KGS E 4000 A/B 6,0 + 3,1 kg - 8711.10092

Other measures as well as the delivery of KGS E 4000 in cartridges can be supplied on request depending on the quantity.

To avoid mixing mistakes both the components should be totally mixed in a bucket/binder bucket with a mixing paddle.





Cyanoacrylate

KGS Cyanoacrylate

For the quick gluing of non supporting or reinforced (construction) parts.
 Good adhesion on stone, rubber, HPL, sandwich panels.
 Cures in just a few seconds. When the activator is used there is instant adhesion.

Good impact resistance
 Good resistance to ageing
 Good moisture resistance

Products

Cyanoacrylate C 1250, Viscosity 280 mPa.s. 8711.20001

Cyanoacrylate C 1500, Viscosity 1500 mPa.s. 8701.10023

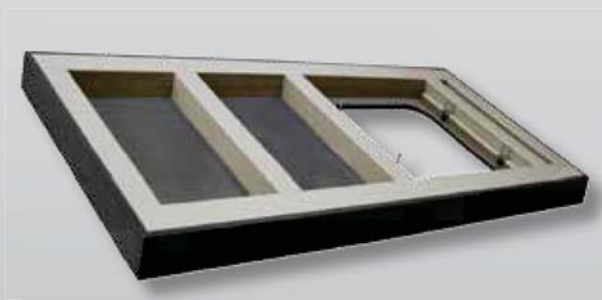
Products

Aktivator 200 ml 8701.10027

Products

Activator AK 1255 - 5 Liter bundle 8711.20003

Activator KGS 5 Liter 8701.10026





MS Polymer

KGS MS Polymer

MS Polymer

Single component MS Glue

High adhesion spectrum on many surfaces like stone, concrete, plastic, metal.

High elasticity also when hardened.

Shore hardness 60 A

Tensile stretch 250%

Curing rate 2mm in 24 hrs

Solvent free

Available colors:

Grey	8711.00109
White	8711.00110
Black	8711.00111
Transparent	8711.00112





Gluing

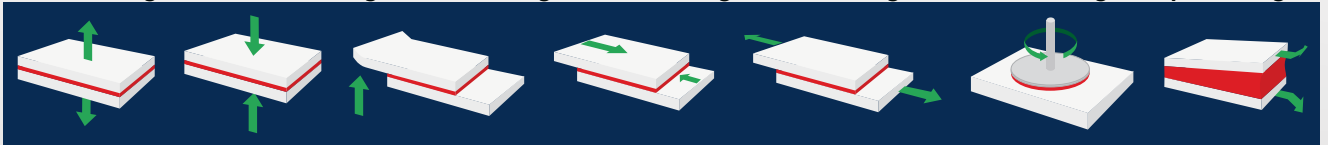
What is gluing?

Gluing is the fastening of 2 materials together by way of a "surface adhesion" and the cohesive strength of the bonding material.

The final use of the end product has a considerable influence on the choice of glue. Factors such as exposure to weather, chemical exposure, extreme temperatures, strength required and the types of materials to be bonded, all influence the correct selection of an adhesive.

Also depending on the final usage there can be several stress factors involved:

Tensile strength / Pressure strength / Peel strength / Push strength / Pull strength / Torsion strength / Split strength



The glue needs to handle these loads with the help of a suitable surface. There are physical boundaries but usually the following is true: The larger the surface area glued, the higher the possible load. Aid to surface area enlargement can be found in geometrical surfaces like for example overlap. Furthermore the viscosity plays a key role in the overall stability of the connection. The limits of the glue need to be respected to avoid unnecessary peak tension. Furthermore the thickness of the joint plays a key role.

The surface preparation is frequently underestimated. The basic requirement of an optimal bond is the proper preparation and cleaning of the contact areas. Impurities like dust or oil can cause the bond to completely fail. To avoid bond failure the contact areas need to be either mechanically or chemically cleaned. When large areas need to be bonded, the cleaning might seem time consuming, never the less it needs to be done properly.

Summary:

Please find here below a list of questions designed to help in the selection of the correct glue.

What materials do you want to glue together?

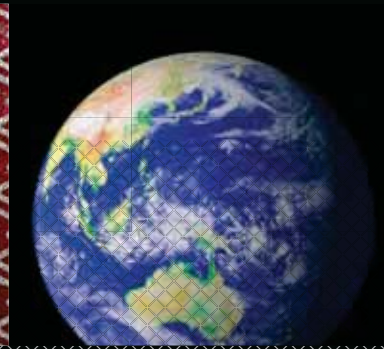
What is the surface energy of the surface? A high surface energy usually requires a high glue strength.

What types of load is the glue exposed to when hardened?

What surface area need to be glued?

Are the seams that need to be glued closed or porous?

At what temperature will the glue be used? The TDS of a glue usually states a temperature of 20°C and a relative humidity of 50-75%. These values are usually not met in working circumstances. A temperature increase speeds up the curing process while a decrease slows it down.



HISTORY

1952 – Founded in Switzerland by Natale Ferronato. Start of cold bonded abrasive manufacturing.

1962 – Introduction of sintering production methods.

1980 – Sandro Ferronato, today's President, joins the company.

1985 – Distribution of the first Flexible Diamond Abrasives.

1988 – KGS subsidiary in Holland.

1991 – KGS subsidiary in Hungary.

1997 – KGS subsidiary in France and Spain.

1999 – KGS subsidiary in UK.

2002 – KGS subsidiary in China.

2004 – Acquisition of WINTER Machines & Tools in Germany.

2005 – KGS subsidiary in Australia.

2008 – Co-investment in GST Portugal

2010 – Full acquisition of GST Portugal. Change of name to KGS DIAMOND PORTUGAL LDA

2013 – Today, the KGS Group has 12 branches worldwide and is renowned as one of the worlds leading abrasives technology groups.

INNOVATION

For over 50 years KGS has been recognised as the world leader in innovative product development for the diamond abrasive industry.

KGS's Research & Development team are continually creating and patenting new products, offering cost effective solutions and state-of-the-art technology that customers can rely on.

KGS was the first ever manufacturer to offer: Swiflex® Flexible Diamond Abrasives designed for dry grinding and polishing of marble and granite.

KGS is also specialised in high-precision Metallized Fabrics for applications in screen printing, filtration and electromagnetic shielding industries.

KGS business philosophy is based upon principles focusing on the customer, providing superior products and services.

QUALITY

The ultimate in Swiss quality and precision technology is the cornerstone of the KGS philosophy.

KGS policy is aimed at continuously improving its products, procedures and processes.

KGS employs Quality Managers and Quality Supervisors at each of its four plants, as well as a full-time Group Quality Manager who regularly audits and controls all KGS plants.

KGS has also introduced the ISO 9001:2000 official quality system into each of its plants.

DISTRIBUTORS

KGS works with a large number of leading distributors around the globe.

Our distributors are highly qualified to provide you with the perfect KGS solution for your every requirement.

For distributor addresses in your area, please contact our international sales office:

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