

siasponge

Full of colour, free of solvent

The colour concept

Uniform colour-coded system for reliable processes

sia Abrasives stands for long-lasting and efficient abrasives with a consistently high-quality grit selection. This ensures the highest quality in all applications and enables any required precision to be achieved on all different kinds of surfaces. The foam abrasives in the siasponge series also possess these quality features. They can be used multiple times and are absolutely efficient. The particular advantage of these sia products is their characteristic colour-coded system, which makes working with siasponge abrasives safer and more convenient because the colour-coded system indicates the grade of each of siasponge's six grits.

The foam backing of each grit corresponds to a colour of the rainbow. You can therefore clearly identify and distinguish between the grits at all times throughout the lifetime of the product - even after excessive use. This prevents mix-ups and provides more safety in professional surface treatment applications. As a result, material damage caused by using the wrong abrasive will be easier to avoid in future.

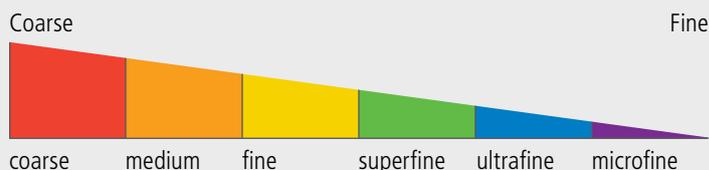
Inspired by nature

People have been studying and researching colours since ancient times – be it scientifically, philosophically or psychologically. Hardly any other phenomenon inspires such extensive and diverse consideration. One prominent example is the “Theory of Colours” published in the 19th century by Goethe, which spans 1,000 pages describing colours and their effect on humans. At the heart of this colour theory, brightness and darkness are opposed to each other – and he assigned various colours to both. Goethe derived a circle with five colours from this: red, yellow, green, blue and violet.

With his understanding of colour, Goethe contradicted scientist Isaac Newton who around one hundred years earlier had described colours by means of refraction and his own test results, showing that white light can be split into different colours using a prism. To this day, the description of so-called “spectral colours” is still based on this.



siasponge grades



The siasponge colour concept

The grit range classifications used for siasponge products are based on colour theory. The various grades of foam abrasives have been subdivided based on the colours of the spectrum here.

The coarsest abrasives (coarse) are therefore red, working all the way down to the finest grit (microfine) which comes in violet.

Foam colour	Grade	7990 siasponge block hard	7991 siasponge block soft	7983 siasponge flex
Red	coarse			
Orange	medium			
Yellow	fine			
Green	superfine			
Blue	ultrafine			



Abrasives in the colours of the rainbow

A natural phenomenon which has been a lifelong fascination to people and which Newton’s approach explains is the rainbow, which provided sia Abrasives with the inspiration for the colour system of its siasponge products. Appearing in the spectral colours red, orange, yellow, green, blue and violet, it becomes visible to anyone standing with their back to the sun and looking at the falling rain.

The physical explanation for this is relatively simple: Sunlight, which consists of a large number (spectrum) of colours, is reflected and refracted in each drop of water. Like in a prism, the light is diverted in the drop depending on its wavelength. As a result, it leaves the drop of water not as white sunlight, but fragmented and almost fanned out into the individual spectral colours. Overlapping beams of light cause a coloured bow with a radius of 40 to 42 degrees to be perceived by the human eye – which is known as a rainbow.

Comparison test of siasponge grades with 1960 siarexx grit ranges

7990 siasponge block hard							ultrafine	ultrafine
7991 siasponge block soft						superfine		superfine
7983 siasponge flex		medium						medium
1960 siarexx	coarse							coarse
	180	220	240	280	320	400	500	600

Comparison test under the following conditions:

Test method: LTM9.0 – sia Abrasives application simulation
 Test equipment: 59.275/Berta, Material: DuPont™ Corian®
 Surface roughness measurement (Rz) as per DIN EN ISO 4287

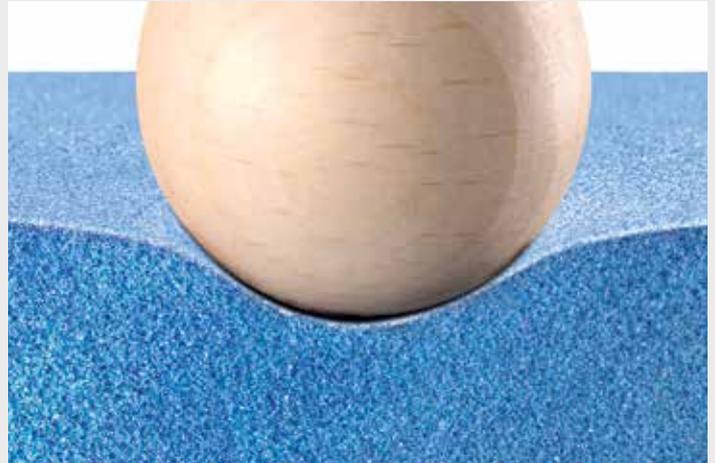
Advantages of foam as a carrier material

Maximum conformability

Due to their conformability, foam abrasives are the ideal choice for areas that are difficult to access and have profiled surfaces. Uneven surfaces such as profiles, rods and curved shapes are the ideal application range for siasponge. The sophisticated shapes of the siasponge block series make it easier to sand rebates and curves.

Your advantage:

- Moulds itself to the workpiece, also when sanding hard-to-reach areas
- Perfect surface finishes, thanks to pressure-distributing foam
- No undercutting in intermediate sanding due to application of excess pressure



Unique kinking characteristics

The combination of soft foam and flexible adhesive enable the products to bend or fold without creating kink folds or breaks that leave scratches on the workpiece. This feature helps the products to achieve an extremely long lifetime, which allows them to be used multiple times or even washed.

Your advantage:

- No damage to the surface due to folds, kinks or ridges
- Repeated folding possible without kinks forming

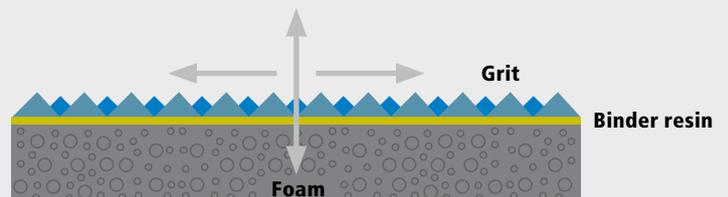


Low clogging thanks to the 3D effect

A combination of soft carrier material and flexible grit bonding reduces clogging of the foam abrasives. Sanding dust is continuously removed from the spaces between the granules. Using more flexible binder resin and optimised distribution with improved 3D embedding of the abrasive grain, it has been possible to further improve the low clogging characteristics. The sponges can therefore be used multiple times.

Your advantage:

- Longer lifetime thanks to less clogging
- Can be used multiple times



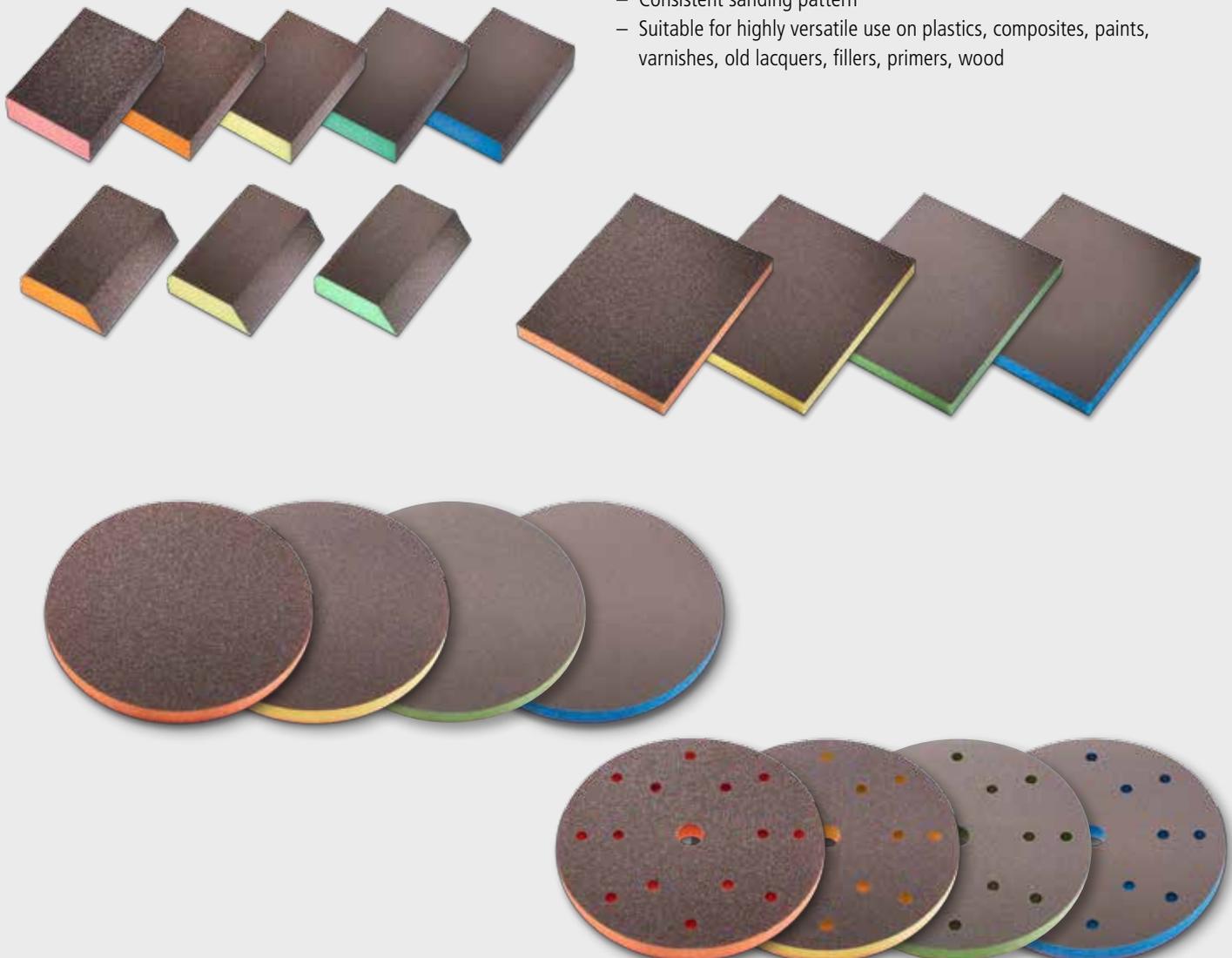
Sustainable and user-oriented



With a view to sustainable production processes, solvent-free binder resins are used in the manufacture of siasponge abrasive sponges. sias Abrasives is therefore committed to avoiding health and environmental risks, reducing unpleasant odours at the workplace and reducing potentially hazardous or explosive vapours.

The advantages of siasponge at a glance:

- Colour coding means you never mix up your sanding grits again
- Highly flexible
- Does not become brittle
- Washable
- No acrid solvent odour
- No folds, no kinks
- Consistent sanding pattern
- Suitable for highly versatile use on plastics, composites, paints, varnishes, old lacquers, fillers, primers, wood



7990 siasponge block hard

For a rapid and simple surface finish

The universally usable sanding blocks excel due to their easy handling. Thanks to their grit coating on all four sides and around the edges, they adapt perfectly to all rebates, edges and profiles. The specially designed shape of the combination block ensures ease of use wherever only one side has to be sanded or also wherever sanding has to be performed in round profiles.

Sanding blocks are easy to clean, enabling them to be used multiple times.



siasponge block
coarse



siasponge block
medium



siasponge block
fine



siasponge block
superfine



siasponge combination block
medium



siasponge combination block
fine



siasponge combination block
superfine

Product profile of block hard

Dimensions:	98 x 69 x 26 mm
Coating:	Four-sided
Grit type:	Aluminium oxide
Binder resin:	Flexible
Carrier material/Backing:	PU (polyurethane) hard



Manual sanding of contours and curves
e.g. sanding wood profiles



Manual sanding of rebates and edges
e.g. keying window frames

Applications of siasponge block

- Keying wood, plastic or metal prior to application of paint
- Fine sanding of filler
- Intermediate sanding of varnishes and paints
- Sanding in rebates and on light curves

Advantages

- Colour coding
- Low clogging
- Can be used wet or dry
- Coated on four sides
- Pressure is distributed uniformly

Product	Foam colour	Grade	Article ID 10 pcs.	Article ID 120 pcs.	Article ID 250 pcs.
7990 siasponge standard block hard	Red	coarse	0070.1256.01	0070.1256.02	0070.1256.03
	Orange	medium	0070.1242.01	0070.1242.02	0070.1242.03
	Yellow	fine	0070.1233.01	0070.1233.02	0070.1233.03
	Green	superfine	0070.1241.01	0070.1241.02	0070.1241.03
combination block	Orange	medium	0070.1255.01	0070.1255.02	0070.1255.03
	Yellow	fine	0070.1230.01	0070.1230.02	0070.1230.03
	Green	superfine	0070.1351.01		0070.1351.03

7991 siasponge block soft

Product profile of block soft

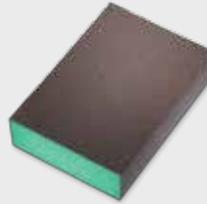
Dimensions: 98 x 69 x 26 mm
 Coating: Four-sided
 Grit type: Aluminium oxide
 Binder resin: Flexible
 Carrier material / Backing: PU (polyurethane) soft



siasponge block
medium



siasponge block
fine



siasponge block
superfine



siasponge block
ultrafine



Manual sanding of special shapes and contours
e.g. preparation for painting over composites



Manual sanding on surfaces and slight curves
e.g. keying paints and lacquers

Distinction between siasponge block hard and siasponge block soft

siasponge block hard

- Printed with serial number 7990
- Available in coarse–superfine
- Stronger, full-surface transfer of the pressure onto the workpiece
- Focus tends to be on material removal

siasponge block soft

- Printed with serial number 7991
- Available in medium–ultrafine
- Adapts better to the shape of the workpiece
- Focus tends to be on finishing

Product	Foam colour	Grade	Article ID 10 pcs.	Article ID 120 pcs.	Article ID 250 pcs.
7991 siasponge standard block soft	Orange	medium	0070.1254.01	0070.1254.02	0070.1254.03
	Yellow	fine	0070.1228.01	0070.1228.02	0070.1228.03
	Green	superfine	0070.1253.01	0070.1253.02	0070.1253.03
	Blue	ultrafine	0070.1260.01	0070.1260.02	0070.1260.03

7983 siasponge flex

For maximum adaptability

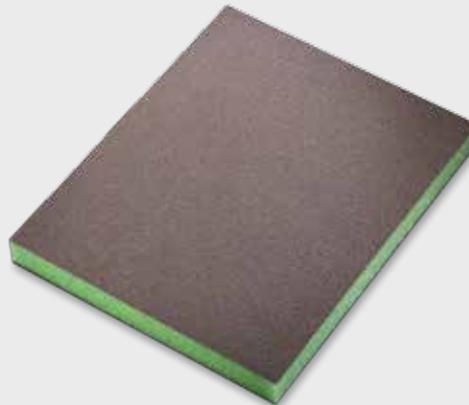
The Standard Pad with extra-soft carrier material adapts perfectly to all profiled and rounded workpieces and exhibits a very low clogging tendency in applications with varnish, filler and paint. These characteristics ensure an even and perfect abrasive pattern without scratching. The Standard Pad can also be used when moist for special applications.

Product profile

Dimensions: 120 x 98 x 13 mm
 Coating: Two-sided
 Grit type: Aluminium oxide
 Binder resin: Flexible
 Carrier material/Backing: PU (polyurethane)



siasponge flex pad
medium



siasponge flex pad
superfine



siasponge flex pad
fine



siasponge flex pad
ultrafine

Applications of siasponge flex

- Keying wood, plastic or metal prior to application of paint
- Fine sanding of filler
- Sanding surfaces, curves and profiles
- Keying without changing the surface shape

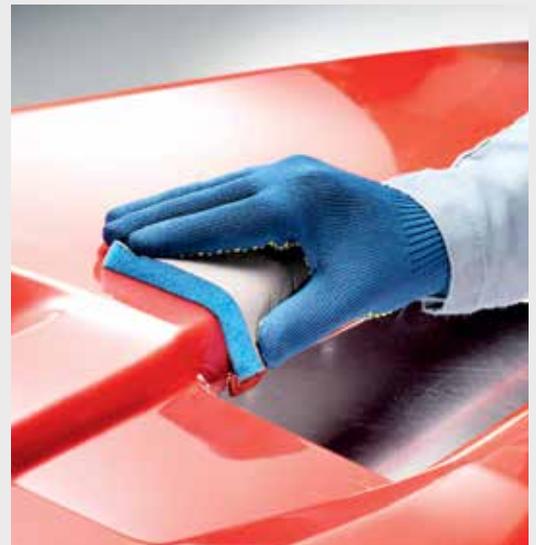
Advantages

- Colour coding
- No undercutting of varnishes and paints
- Moulds itself to the workpiece
- Low clogging
- Can be used multiple times

Product	Foam colour	Grade	Article ID 10 pcs.	Article ID 100 pcs.	Article ID 250 pcs. (bulk)
7983 siasponge flex pad	Orange	medium	0070.1244.01	0070.1244.06	0070.1244.02
	Yellow	fine	0070.1247.01	0070.1247.06	0070.1247.02
	Green	superfine	0070.1232.01	0070.1232.06	0070.1232.02
	Blue	ultrafine	0070.1243.01	0070.1243.06	0070.1243.02



Manual sanding of contours and edges
e.g. preparation for painting over painted workpieces



Manual sanding of hard-to-reach areas
e.g. keying/sanding of plastic parts, intermediate sanding in hard-to-reach areas



Manual sanding of special shapes
e.g. preparation for painting over various materials

Tip

In which applications do the siasponge flex product display their advantages over conventional abrasives?

If there is a risk of changing the geometry of a workpiece by sanding it, then it makes sense to perform the sanding application with the 7983 siasponge flex series. Thanks to its equalising foam layer, this abrasive rests evenly on the different levels of the object you are sanding. This produces an even sanding result on uneven surfaces without, for example, edges being sanded off or unwanted scratches occurring – be it intermediate lacquer sanding or fine sanding. To enable you to work efficiently even on larger surfaces, sia Abrasives now also offers the tried-and-tested Standard Pad quality as discs with the siafast fastening system for portable machine sanding.



7983 siasponge flex disc

The flexible foam disc for use on curved surfaces

The siasponge flex disc is very flexible, enabling it to adapt perfectly to the shape of the workpiece. The disc thickness also provides enough play to distribute the pressure evenly on uneven surfaces. As a result, portable machines can be used even on larger surfaces without exposing the surface to the risk of undercutting.

Product profile

Dimensions:	Ø 150 x 13 mm
Coating:	Single-sided
Grit type:	Aluminium oxide
Binder resin:	Flexible
Carrier material/ Backing:	PU (polyurethane)
Back:	Velour (red)



siasponge flex disc
medium

siasponge flex disc
fine

siasponge flex disc
superfine

siasponge flex disc
ultrafine

Application of siasponge flex disc

- Keying wood, plastic or metal prior to application of paint
- Fine sanding of filler
- Sanding surfaces, curves and profiles
- Keying without changing the surface shape

Advantages

- Colour coding
- No undercutting of varnishes and paints
- Moulds itself to the workpiece
- Low clogging
- Efficient machine sanding

Product	Foam colour	Grade	Hole pattern	Article ID 10 pcs.
7983 siasponge flex disc	Orange	medium	no holes	0070.1250.01
	Orange	medium	15-hole	0070.1235.01
	Yellow	fine	no holes	0070.1251.01
	Yellow	fine	15-hole	0070.1234.01
	Green	superfine	no holes	0070.1403.01
	Green	superfine	15-hole	0070.1402.01
	Blue	ultrafine	no holes	0070.1249.01
	Blue	ultrafine	15-hole	0070.1252.01



Machine applications for shapes and contours
e.g. preparation before painting



Machine sanding of curves
e.g. boat building and accessories

Other products from the siasponge range

The selection of siasponge soft pads and discs completes our range of colour-coded foam abrasives. The grit range classifications for these are also arranged according to the colours of the rainbow.

Further information is available online at www.sia-abrasives.com

Foam colour	Grade	7970 siasponge soft pad	7972 siasponge soft pad	7972 siasponge soft disc
Orange	medium			
Yellow	fine			
Green	superfine			
Blue	ultrafine			
Violet	microfine			



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