



# SurfacePrep



**Abrasives**

## Contents

Properties For Choosing an Abrasive	2	Chilled Iron	11
JBlast	3	Profilium	11
Stonegrit	3	Avialite Type II	12
Calcium Silicate	4	Avialite Type III	12
Aquagrit	4	Avialite Type V	13
Sodium Bicarbonate	5	Avialite Gelblast	13
Calcium Carbonate	5	Deflashing	14
Garnet	6	Black Silicon Carbide	14
Brown Aluminium Oxide	6	Bauxite	15
White Aluminium Oxide	7	Emery	15
Pink Aluminium Oxide	7	Sinterball	16
Glass Bead	8	Walnut Shell	16
Crushed Glass	8	EnviraSponge	17
Steel Shot	9	Mass Finishing	17
Steel Grit	9	Quality and Reseach	18
Stainless Steel Shot/Grit	10	Media Reprocessing and Disposal	18

## Which properties are important when choosing an abrasive?

### Density

The most efficient and fastest cleaning of a surface is achieved when using abrasives with a higher density. Dense particles impact with more kinetic energy over a smaller surface area, resulting in a deeper profile. Dense particles also deform less, absorbing less energy upon impact.

### Particle Size

The bigger the particle, the deeper the indentation it will make, but blasting large particles will result in fewer impacts than an equal volume of smaller particles. Small particles clean faster, provide better coverage, and result in a more uniform profile. The most efficient approach is to use the smallest particle necessary to achieve the desired profile.

### Recyclability

Whether you use expendable or recyclable abrasives, will be determined by the application and blasting equipment you use to carry out the job. Expendable abrasives are mostly used in open environments, and recyclable abrasives are used in contaminated environments. For example in blast cabinets or blast rooms where a recycling system is implemented.

### Dust Levels

Dust levels are particularly important when considering the environment in which the blasting is taking place. Open nozzle blasting in an uncontrolled environment will be most suited to lower dust levels. This is also the case for hazardous environments where visibility is paramount. An enclosed blast room with suitable ventilation and dust extraction can help manage dust levels.

### Media Shape

The shape of the abrasive used in an application is mostly determined by the coating being removed and/or the type of profile that needs to be created. An angular abrasive will have more of an impact on a surface than a rounded/spherical abrasive.

### Hardness

Generally speaking, the harder the particle, the deeper the profile it will make. The exception is in cases where a high-velocity hard particle shatters, delivering less than optimum force.





## JBlast

JBlast is produced from mineral slags from the by product of furnace operations. It was specially introduced in the 1960's to provide grit blasting contractors and industry with a safe alternative to sand, as an expendable abrasive for use in portable air blast cleaning applications. Ever since JBlast has been the industry standard for quality and reliability.

Properties		Grades	
Density	3.7 g/cm <sup>3</sup>	Standard	1.4 - 2.5 mm
Bulk Density	1.75g/cm <sup>3</sup>	Supa	0.2 - 1.5 mm
Hardness	7 - 8 Mohs	Supa Fine	0.2 - 0.7 mm
Friability	High	Special	0.15 - 0.2 mm
Recyclability	None		
Dust Levels	High		
Colour	Grey/Black		
Media	Angular		
Shape			

- Depainting •Surface Preparation •Vehicles •Metals •Automotive • Construction & Refurbishment
- Marine •Open Nozzle Blasting •Anti-Slip/Anti-Skid Applications •Aggregate/Decorative



## Stonegrit

A blended material combining both mineral slags and synthetic material to create a specialist abrasive product.

Properties		Grades	
Density	3.1 g/cm <sup>3</sup>	Coarse	1.4 - 2.5 mm
Bulk Density	1.45g/cm <sup>3</sup>	Fine	0.2 - 1.5 mm
Hardness	6 - 7 Mohs	Extra Fine	0.2 - 0.7 mm
Friability	High		
Recyclability	None		
Dust Levels	High		
Colour	Multi		
Media	Angular		
Shape			

- Stone/Masonry/Concrete •Surface Preparation • Construction & Refurbishment •Open Nozzle Blasting •Surface Finishing •Metals •Marine •Wood



### Calcium Silicate

A light-coloured silicate synthetic mineral abrasive produced from the by product of furnace operations.

Properties		Grades	
Density	2.8 g/cm <sup>3</sup>	S.C.	0.1 - 0.6 mm
Bulk Density	1.35g/cm <sup>3</sup>		
Hardness	5 - 6 Mohs		
Friability	High		
Recyclability	None		
Dust Levels	High		
Colour	Beige		
Media Shape	Angular		

•Stone/Masonry/Concrete •Surface Preparation • Wood •Construction & Refurbishment



### Aquagrit

A controlled mixture of inert recycled products including glass from bottle banks. This abrasive is particularly suited to our slurry and wet blast machines.

Properties		Grades	
Density	2.75 g/cm <sup>3</sup>	Fine Extra Fine	0.2 - 1.5 mm
Bulk Density	1.5g/cm <sup>3</sup>		0.2 - 0.7 mm
Hardness	5 - 6 Mohs		
Friability	High		
Recyclability	None		
Dust Levels	High		
Colour	Multi		
Media Shape	Angular		

•Surface Preparation • Wet/Slurry Blasting •Metals •Plastics & Composites •Wood •Open Nozzle Blasting •Vapour Blasting



### Sodium Bicarbonate

A soluble, light weight, soft material commonly used for surface finishing applications where little or no profile is required on the surface.

Properties		Grades	
Density	2.2 g/cm <sup>3</sup>	Ultra	~0.28 mm
Bulk Density	2.2 g/cm <sup>3</sup>	Coarse	
Hardness	2.5 Mohs		
Friability	High		
Recyclability	None		
Dust Levels	High		
Colour	White		
Media	Angular		
Shape			

•Stone/Masonry/Concrete •Surface Finishing •Surface Preparation •Vehicles •Wood



### Calcium Carbonate

Fine carboniferous limestone granules. The product is crushed and screened several times, then air classified to produce a material of high purity with a controlled level of fines. It is dried to give a very low moisture content.

Properties		Grades	
Density	2.7 -2.9 g/cm <sup>3</sup>	Ultra	1.18 - 3.35mm
Bulk Density	0.53 g/cm <sup>3</sup>	Coarse	
Hardness	3 Mohs	Coarse	0.6 - 1.18 mm
Friability	Very High	Medium	0.15 - 1.18 mm
Recyclability	None	Fine	0.15 - 0.3 mm
Dust Levels	Very High		
Colour	Off White		
Media	Semi-Angular		
Shape			

•Stone/Masonry/Concrete •Surface Finishing •Surface Preparation •Vehicles •Wood





## Garnet

Garnet is a naturally occurring mineral. It is popular as an expendable blast media offering a cleaner application than traditional expendables, with improved cutting performance, compatibility to non ferrous metals and low tendency to embedment. In 80 and 120 grades, the media is used extensively as a waterjet cutting media. The product is tested in accordance with ISO11126-10 and ISO11127-6 & 7. It is compliant with Rolls Royce CSS211 specification.

Properties		Grades	
Density	4.1 g/cm <sup>3</sup>	GAR-MAC8/16	2.36 - 1.18 mm
Bulk Density	2.38 g/cm <sup>3</sup>	GAR-MAC12/25	0.7 - 1.7 mm
Hardness	7 - 8 Mohs	GAR-MAC20/40	0.425 - 0.85 mm
Friability	High	GAR-MAC30/60	0.25 - 0.6 mm
Recyclability	Very Low	GAR-MAC80	0.15 - 0.425 mm
Dust Levels	Medium/High	GAR-MAC120	0.106 - 0.25 mm
Colour	Deep Red		
Media Shape	Semi - Angular		

•Surface Finishing •Surface Preparation •Metals • Wood •Filtration Media •Open Nozzle Blasting  
•Marine •Waterjet Cutting



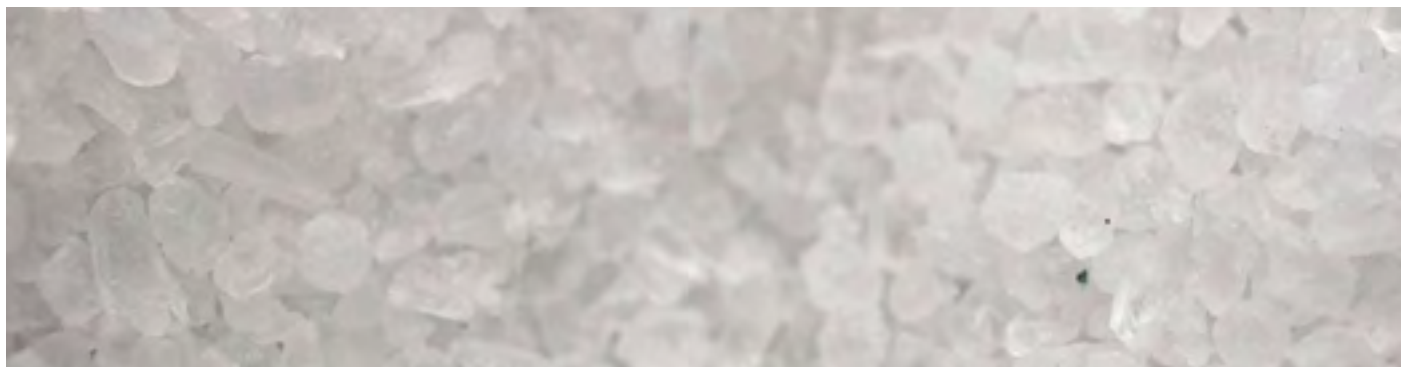
## Brown Aluminium Oxide

A high grade, high purity alumina manufactured from the controlled melting of calcined bauxite, silica, coke and iron.

Available in commercial grades and premium grades specifically approved for aerospace applications, conforming to specifications such as Rolls Royce CSS12, Airbus ABR9-0160 etc.

Properties		Grades	
Density	3.95 g/cm <sup>3</sup>	BA12	~1.765 mm
Bulk Density	1.64 - 1.88 g/cm <sup>3</sup>	BA20	~1.04 mm
Hardness	9 Mohs	BA36	~0.525 mm
Friability	Medium	BA54	~0.310 mm
Recyclability	High	BA80	~0.185 mm
Dust Levels	Medium	BA120	~0.109 mm
Colour	Brown	BA180	~0.069 mm
Media Shape	Angular	BA220	~0.058 mm

•Surface Finishing •Surface Preparation •Bonded & Coated Abrasives •Castings and Forgings  
•Refractories & Furnace Linings •Anti-Slip/Safety Flooring •Glass & Ceramics •Plastics & Composites •Metals •Polishing

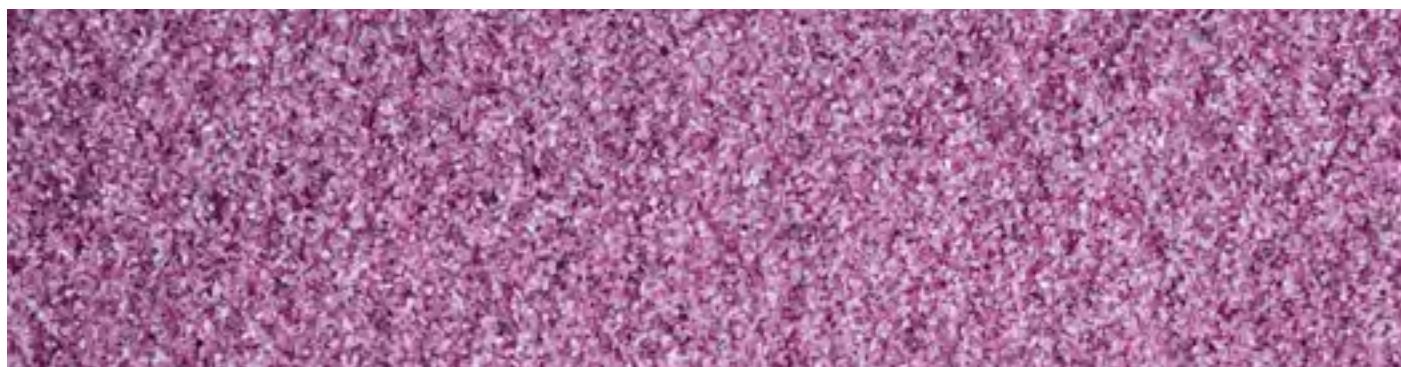


## White Aluminium Oxide

A high grade, ultra pure alumina manufactured calcined alumina. Available in commercial grades and premium grades specifically approved for aerospace applications, such as Rolls Royce CSS12, Airbus ABR9-0160 etc.

Properties		Grades	
Density	3.95 g/cm <sup>3</sup>	WA12	~1.765 mm
Bulk Density	1.64 - 1.88 g/cm <sup>3</sup>	WA20	~1.04 mm
Hardness	9.5 Mohs	WA36	~0.525 mm
Friability	Low	WA54	~0.31 mm
Recyclability	High	WA80	~0.185 mm
Dust Levels	Medium	WA120	~0.109 mm
Colour	White	WA180	~0.069 mm
Media	Angular	WA220	~0.058 mm
Shape			

•Surface Finishing •Surface Preparation •Bonded & Coated Abrasives •Castings & Forgings  
•Refractories & Furnace Linings •Anti-Slip/Safety Flooring •Glass & Ceramics •Plastics & Composites •Metals •Polishing



## Pink Aluminium Oxide

Pink fused alumina is manufactured from calcined alumina with a small addition of chrome. One of the toughest fused aluminas available, the addition of typically 0.2% chrome within the melt of the fusion process renders a tougher grain than that of white fused alumina.

Properties		Grades	
Density	3.89 g/cm <sup>3</sup>	PINK36	~0.525 mm
Bulk Density	1.64 - 1.88 g/cm <sup>3</sup>	PINK60	~0.260 mm
Hardness	9.5 Mohs	PINK80	~0.185 mm
Friability	Low	PINK120	~0.109 mm
Recyclability	High	PINK150	~0.082 mm
Dust Levels	Medium	PINK180	~0.069 mm
Colour	Pink		
Media	Angular		
Shape			

•Wet/Slurry Blasting •Metals •Plastics & Composites •Glass & Ceramics •Bonded & Coated Abrasives •Castings & Forgings





## Glass Bead

A high grade soda lime bead manufactured by the process of cascading a granulated soda lime glass powder or grain into a vertical kiln and then using the effect of softening the glass and gravity to cause the rounding of the glass grit or cullet. This technique has been refined to produce a sphere that is almost perfectly round, and in the reflective product, produces a prism that can have refractive indices as high as 2. Available in commercial, premium AMS and military specifications.

Properties		Grades	
Density	2.55 g/cm <sup>3</sup>	GBBT3	0.590 - 0.840 mm
Bulk Density	1.5 g/cm <sup>3</sup>	GBBT4	0.420 - 0.590 mm
Hardness	5 Mohs	GBBOL21	0.250 - 0.420 mm
Friability	Medium	GBBOL23	0.177 - 0.297 mm
Recyclability	Medium	GBBOL24	0.149 - 0.250 mm
Dust Levels	Low	GBBOL25	0.105 - 0.210 mm
Colour	Clear/White	GBBOL26	0.074 - 0.149 mm
		GBBOL27	0.053 - 0.105 mm
Media Shape	Spherical	GBBT13	0.044 - 0.088 mm
		GBBOL30	0.030 - 0.062 mm

•Polishing •Shot Peening •Surface Finishing •Metals •Aerospace Castings •Anti-Slip/Safety Flooring •Automotive •Castings & Forgings •Coatings/Paints/Resins



## Crushed Glass

A high grade soda lime glass which has been crushed and graded into glass grit.

Properties		Grades	
Density	2.5 gcm <sup>3</sup>	CG2000/3000	2.0 - 3.0 mm
Bulk Density	1.5 g/cm <sup>3</sup>	CG1700/3000	1.7 - 3 mm
Hardness	5 Mohs	CG800/1700	0.8 - 1.7 mm
Friability	High	CG600/800	0.6 - 0.8 mm
Recyclability	None	CG300/800	0.3 - 0.8 mm
Dust Levels	Medium/High	CG300/600	0.3 - 0.6 mm
Colour	Clear/White	CG200/300	0.2 - 0.3 mm
Media Shape	Angular		

•Surface Finishing •Surface Preparation •Graffiti Removal •Metals •Plastics & Composites •Wood  
•Bonded & Coated Abrasives •Coatings/Paints/Resins •Anti-Slip/Safety Flooring



### Steel Shot

A high standard roundness steel shot, which gives a hammered or peened effect for use on ferrous castings and fabrications. Available in commercial and military grades which comply with MIL-S-13165C and AMS 2431.

Properties		Grades	
Density	7.8 g/cm³	SS780	2.00 - 2.80 mm
Bulk Density	4.6 g/cm³	SS660	1.70 - 2.40 mm
Hardness	45 - 52 HRC	SS550	1.40 - 2.00 mm
Friability	Very Low	SS460	1.20 - 1.70 mm
Recyclability	Very High	SS390	1.00 - 1.40 mm
Dust Levels	Very Low	SS330	0.85 - 1.20 mm
Colour	Blue/Grey	SS280	0.71 - 1.00 mm
Media Shape	Spherical	SS230	0.60 - 0.85 mm
		SS170	0.42 - 0.71 mm
		SS110	0.30 - 0.50 mm
		SS70	0.18 - 0.35 mm

•Ferrous Substrates •Shot Peening •Surface Finishing •Surface Preparation •Metals •Aerospace Castings •Diffused and Plasma Coatings •Powder Coating and Stove Enamelling •Ballast



### Steel Grit

An angular steel abrasive media produced by crushing high grade steel shot. Steel Grit provides a grey hammered finish. Available in standard, medium and hard specifications.

Properties		Grades	
Density	7.8 g/cm³	SG12	1.70 - 2.40 mm
Bulk Density	4.6 g/cm³	SG14	1.40 - 2.00 mm
Hardness		SG16	1.20 - 1.70 mm
Standard	44 - 50 HRC	SG18	1.00 - 1.40 mm
Medium	54 - 60 HRC	SG25	0.70 - 1.20 mm
Hard	64 HRC	SG40	0.42 - 1.00 mm
Friability	Very Low	SG50	0.30 - 0.71 mm
Recyclability	Very High	SG80	0.18 - 0.42 mm
Dust Levels	Very Low		
Colour	Blue/Grey		
Media Shape	Angular		

•Ferrous Substrates •Surface Finishing •Surface Preparation •Metals •Aerospace Castings •Ballast





### Stainless Steel Shot

A chrome nickel stainless steel shot with an austenitic micro structure used mainly for the treatment of non-ferrous metals and stainless steel parts.

Properties		Grades	
Density	7.6 g/cm <sup>3</sup>	S/SS200	1.18 - 2.00 mm
Bulk Density	4.7 g/cm <sup>3</sup>	S/SS150	1.00 - 1.70 mm
Hardness	36 HRC	S/SS100	0.85 - 1.40 mm
Friability	Very Low	S/SS60	0.50 - 1.18 mm
Recyclability	Very High	S/SS50	0.425 - 1.00 mm
Dust Levels	Very Low	S/SS40	0.30 - 0.85 mm
Colour	Grey/Silver	S/SS30	0.125 - 0.50 mm
Media	Spherical	S/SS20	0.075 - 0.355 mm
Shape		S/SS10	0.075 - 0.180 mm

•Surface Preparation •Metals •Aerospace Castings •Alloy Wheel Repair & Refurbishment •Diffused & Plasma Coatings •Nuclear & Power Generation •Oil & Gas Industries •Peening •Ballast

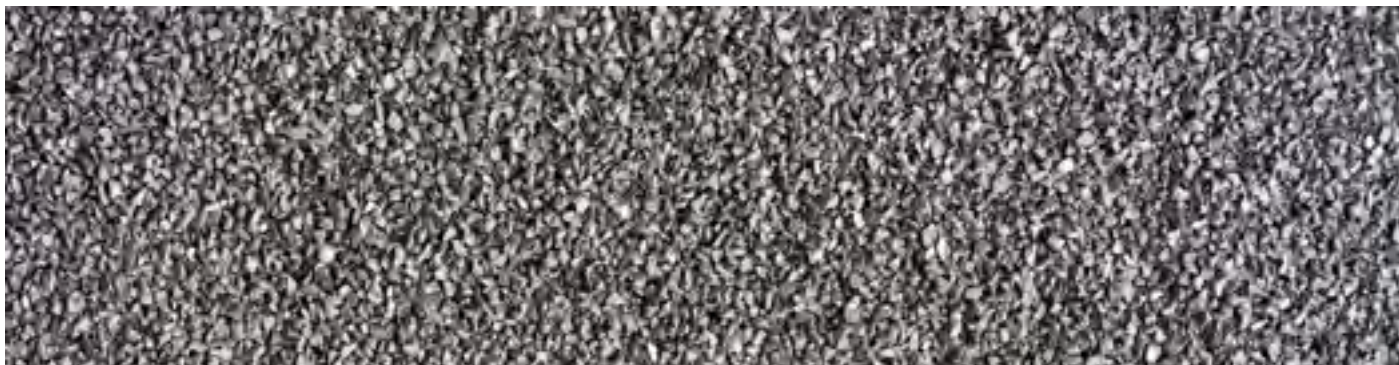


### Stainless Steel Grit

A stainless steel grit with a high chromium level of 30%, used as an alternative to corundum with benefits including a more stable operating mix and reduced abrasive consumption.

Properties		Grades	
Density	7.4 g/cm <sup>3</sup>	S/SG200	1.40 - 2.36 mm
Bulk Density		S/SG150	1.18 - 2.00 mm
Hardness	58HRC	S/SG100	1.00 - 1.70 mm
Friability	Very Low	S/SG60	0.71 - 1.18 mm
Recyclability	Very High	S/SG50	0.60 - 1.00 mm
Dust Levels	Very Low	S/SG40	0.425 - 0.85 mm
Colour	Grey/Silver	S/SG30	0.18 - 0.60 mm
Media	Angular	S/SG20	0.125 - 0.355 mm
Shape		S/SG10	0.075 - 0.18 mm

•Surface Finishing •Surface Preparation •Metals •Aerospace Castings •Alloy Wheel Repair & Refurbishment •Diffused & Plasma Coatings •Nuclear & Power Generation •Oil & Gas Industries •Peening •Ballast



## Chilled Iron

A recast fused iron abrasive media in angular form. This is a tough and aggressive metal abrasive, which offers a clean cutting edge with every pass. Due to its high aggression and ferrous make up this product is specified for use on ferrous substrates or materials where ferrous cross contamination is acceptable.

Properties		Grades	
Density	7 g/cm <sup>3</sup>	G47	1.20 - 1.70 mm
Bulk Density	3.5 - 4 g/cm <sup>3</sup>	G34	0.85 - 1.20 mm
Hardness	62 HRC	G24	0.60 - 1.00 mm
Friability	Very Low	G17	0.42 - 0.85 mm
Recyclability	Very High	G12	0.30 - 0.71 mm
Dust Levels	Very Low	G07	0.18 - 0.42 mm
Colour	Grey		
Media Shape	Angular		

- Ferrous Substrate •Rust Removal •Surface Finishing •Surface Preparation •Metals •Descaling
- Ballast



## Profilium

Profilium is a reusable steel abrasive that can be used as an alternative to chilled iron or steel grit.

Properties		Grades	
Density	7.8 g/cm <sup>3</sup>	PRO23	0.71 mm
Bulk Density	4.6 g/cm <sup>3</sup>	PRO45	0.42 mm
Hardness	66 HRC	PRO58	0.30 mm
Friability	Very Low	PRO85	0.18 mm
Recyclability	Very High		
Dust Levels	Very Low		
Colour	Grey		
Media Shape	Angular		

- Ferrous Substrate •Rust Removal •Surface Finishing •Surface Preparation •Metals •Descaling
- Ballast





### Avialite Type II

Urea amino plastic blast media manufactured from prime cured mouldings. Available in commercial and military specifications, such as Rolls Royce CSS227 and MIL-P-85891A.

Properties		Grades	
Density	1.4 - 1.6 g/cm <sup>3</sup>	T2 12/16	12/16
Bulk Density	0.7g/cm <sup>3</sup>	T2 16/20	16/20
Hardness	3 - 3.5 Mohs	T2 12/20	12/20
Friability	Medium	T2 20/30	20/30
Recyclability	High	T2 30/40	30/40
Dust Levels	Very Low	T2 20/40	20/40
Colour	Multi to White/ Beige	T2 40/60	40/60
Media Shape	Semi-Cubical/ Angular	T2 60/80	60/80

- Military •Automotive •Electronics •Graffiti Removal •Aerospace •Tyre & Rubber Applications
- Plastic Moulding



### Avialite Type III

Melamine amino plastic blast media manufactured from prime cured mouldings. Available in commercial, aerospace and military specifications, such as Rolls Royce CSS227 and MIL-P-85891A.

Properties		Grades	
Density	1.4 - 1.6 g/cm <sup>3</sup>	T3 12/16	12/16
Bulk Density	0.7 g/cm <sup>3</sup>	T3 16/20	16/20
Hardness	3.5 - 4 Mohs	T3 12/20	12/20
Friability	Medium	T3 20/30	20/30
Recyclability	High	T3 30/40	30/40
Dust Levels	Very Low	T3 20/40	20/40
Colour	Multi	T3 40/60	40/60
Media Shape	Semi-Cubical/ Angular	T3 60/80	60/80

- Military •Automotive •Electronics •Graffiti Removal •Aerospace •Tyre & Rubber Applications
- Plastic Moulding



### Avialite Type V

Acrylic plastic blast media that is manufactured from fully cast acrylic mouldings and sheet product. Available in commercial, aerospace and military specifications, such as Rolls Royce CSS227 and MIL-P-85891A.

Properties		Grades	
Density	1.15 - 1.2 g/cm <sup>3</sup>	T5 12/16	12/16
Bulk Density	0.58 - 0.65 g/cm <sup>3</sup>	T5 16/20	16/20
Hardness	2.5 - 3.0 Mohs	T5 12/20	12/20
Friability	Medium	T5 20/30	20/30
Recyclability	High	T5 30/40	30/40
Dust Levels	Very Low	T5 20/40	20/40
Colour	Multi	T5 40/60	40/60
Media Shape	Semi-Cubical/ Angular	T5 60/80	60/80

•Aircraft Bodies •Depainting •Surface Finishing •Surface Preparation •Metals •Plastics & Composites •Glass & Ceramics •Wood •Aerospace •Automotive



### Avialite Gelblast

Fine grade amino plastic blast media. Used mostly as an alternative to Sodium Bicarbonate and mainly used to remove paint and coatings from aluminium and composite materials without damaging the substrate.

Properties		Grades	
Density	1.47 - 1.52 g/cm <sup>3</sup>	GEL2	< 0.18 mm
Bulk Density	0.7 g/cm <sup>3</sup>		
Hardness	3.5 Mohs		
Friability	Medium		
Recyclability	Medium		
Dust Levels	Very Low		
Colour	White		
Media Shape	Semi-Cubical		

•Depainting •Surface Finishing •Surface Preparation •Vehicles •Graffiti Removal •Metals •Plastics & Composites •Soda Blasting •Vapour Blasting



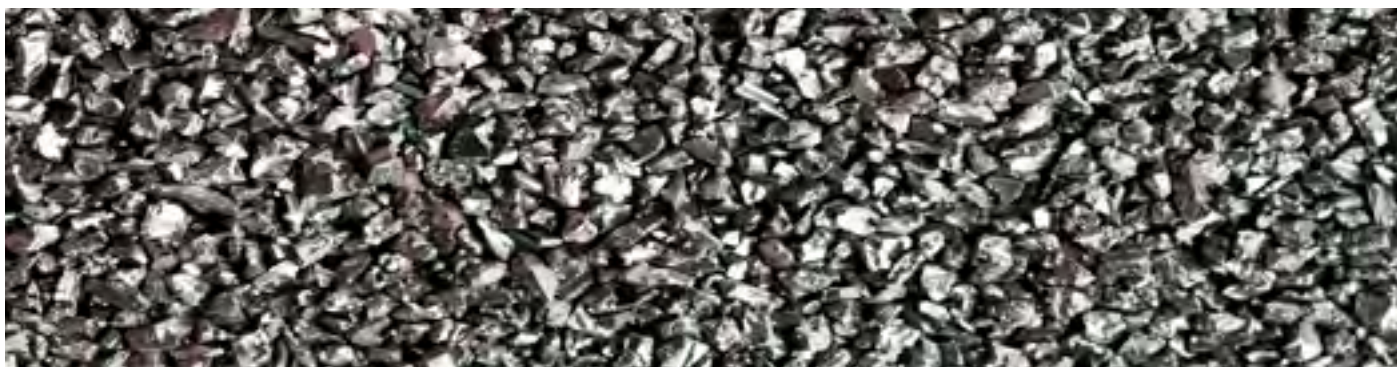


## Deflashing

Polyflash and Nyflash plastic media is a specially formulated polycarbonate thermoplastic media. Produced from virgin PC or prime recycled product, the media, is extruded and pelletised into a cylindrical or cube shape in a range of sizes with exceptionally tight dimensional tolerances.

Properties		Grades	
Density	1.1 - 1.23 g/cm <sup>3</sup>	Contact us for part numbers	2.00 mm
Bulk Density	0.7g/cm <sup>3</sup>		1.50 mm
Hardness	3.0 - 3.2 Mohs		1.20 mm
Friability	Low		1.00 mm
Recyclability	Medium		0.75 mm
Dust Levels	Low		0.50 mm
Colour	Various		0.40 mm
Media Shape	Cubical or Cylindrical		0.30 mm
			0.20 mm

•Deburring •Deflashing •Metals •Plastics & Composites •Aerospace Composites



## Black Silicon Carbide

A high grade electro fused black silicon carbide manufactured by the fusion of petroleum coke and silica sand.

Properties		Grades	
Density	3.2 g/cm <sup>3</sup>	BSC12	~1.765 mm
Bulk Density	1.64 - 1.88 g/cm <sup>3</sup>	BSC20	~1.040 mm
Hardness	6 Mohs	BSC30	~0.625 mm
Friability	Medium	BSC36	~0.525 mm
Recyclability	Medium	BSC54	~0.310 mm
Dust Levels	Low	BSC80	~0.185 mm
Colour	Black Iridescent	BSC120	~0.109 mm
Media Shape	Angular	BSC180	~0.069 mm
		BSC280	~0.036 mm

•Polishing •Surface Finishing •Surface Preparation •Metals •Aerospace Castings •Anti Slip Flooring, Resins & Paints •Bonded & Coated Abrasives



## Bauxite

A high grade calcined material produced in a rotary kiln providing a premium, highly durable abrasive product. Available in both grey and buff.

Properties		Grades	
Density	3.0 g/cm <sup>3</sup>	BBAUX1-3	1 - 3 mm
Bulk Density	1.3 - 1.4 g/cm <sup>3</sup>	GBAUX1-3	1 - 3 mm
Hardness	8 - 9 Mohs	BBAUX09-14	0.9 - 1.4 mm
Friability	N/A	GBAUX09-1.4	0.9 - 1.4 mm
Recyclability	N/A		
Dust Levels	N/A		
Colour	Grey or Beige		
Media	Semi Angular		
Shape			

•Anti Skid/Road Maintenance •Anti Slip/Safety Flooring •Refractories & Furnace Linings



## Emery

A naturally formed, mid to high quality, hard material screened and graded to be used in different sectors.

Properties		Grades	
Density	3.5 g/cm <sup>3</sup>	EME5-3	3 - 5 mm
Bulk Density	1.3 - 1.9 g/cm <sup>3</sup>	EME3-2	2 - 3 mm
Hardness	7.5 - 8.5 Mohs	EME3-1	1 - 3 mm
Friability	Medium	EME2-1	1 - 2 mm
Recyclability	Medium		
Dust Levels	Medium		
Colour	Grey/Black		
Media	Semi-Angular		
Shape			

•Anti Skid/Road Maintenance •Anti Slip/Safety Flooring •Refractories & Furnace Linings •Fillers & Additives





## Walnut Shell

A natural abrasive which is from the kernal of a walnut and has been crushed and graded.

Properties		Grades	
Density	1 - 1.3 g/cm <sup>3</sup>	Grade 1	1.0 - 2.5 mm
Bulk Density	0.45 - 0.65 g/cm <sup>3</sup>	Grade 2	1.0 - 2.0 mm
Hardness	2.5 Mohs	Grade 3	0.7 - 1.5 mm
Friability	Medium	Grade 4	0.65 - 1.0 mm
Recyclability	Medium	Grade 5	0.45 - 0.80 mm
Dust Levels	Low	Grade 6	0.3 - 0.6 mm
Colour	Beige/Brown		
Media Shape	Semi-Angular		

•Deburring •Depainting •Surface Finishing •Surface Preparation •Vehicles •Metals •Plastics & Composites •Glass & Ceramics •Wood



## Sinterball

Sintered spheres of Alpha Alumina, originally designed as a media for opening oil wells. This product has established itself as a long life alumina, a product of particular use in the monumental masonry trade.

Properties		Grades	
Density	3.0 g/cm <sup>3</sup>	SIN12/20	12/20
Bulk Density	2.2 g/cm <sup>3</sup>	SIN20/40	20/40
Hardness	9 Mohs	SIN40/70	40/70
Friability	Medium	SIN50/70	50/70
Recyclability	Medium		
Dust Levels	Low		
Colour	Black		
Media Shape	Spherical		

•Etching •Stone & Masonry •Surface Finishing •Surface Preparation •Metals •Glass & Ceramics •Anti Slip/Safety Flooring •Anti Slip Resins & Paints •Bonded & Coated Abrasives •Vapour Blasting





### EnviraSponge

Abrasive media encapsulated within sponge. Designed to capture dust on impact and achieve safe, sustainable surface preparation, whilst also being environmentally responsible. EnviraSponge is recyclable and minimises waste generated during surface cleaning, reduces downtime onsite and the need for onsite dust extraction. Sponge can be used to encapsulate most media, with the most popular being aluminium oxide.

Properties		Grades	
Density	Variable on media type	ESG17	Chilled Iron 17
Bulk Density	Variable on media type	ESA16	Aluminium Oxide 14/24
Hardness	Variable on media type	ESA30	Aluminium Oxide 30/40
Friability	Low/Medium	ESA60	Aluminium Oxide 60/80
Recyclability	Medium	ESA80	Aluminium Oxide 80/100
Dust Levels	Low	ESA120	Aluminium Oxide 120
Colour	Variable on media type	ESA220	Aluminium Oxide 220
Media Shape	Angular/Irregular	ESA500	Aluminium Oxide 500
		ESGT30	Garnet 30/60
		ESGB60	Glass Bead 60/100

•Offshore •Surface Finishing •SurfacePreparation •Metals •Bridges & Station Cleaning •Nuclear & Power Generation •Oil & Gas Industries •Rail Industry •Marine •Storage Tanks



### Vibratory Finishing and Tumbling Media

Vibratory finishing is a surface treatment process using media, compounds, water, and motion to clean, deburr, burnish, descale, or polish components. Commonly used media types include ceramic for hard materials, plastic for softer metals, steel for burnishing, and organic options like walnut shells for drying and polishing. This cost-effective process delivers consistent finishes, reduces manual labour, and improves product appearance, making it widely used in industries such as aerospace, medical implants, and transportation.

SurfacePrep provides expert guidance, cutting edge technology, and a wide range of media and equipment to achieve optimal results for diverse finishing needs.



## Quality and Research

Our state of the art abrasive manufacturing facility in Sheffield ensures production continuity and the ability to produce the finest quality products. With a UK based warehouse space in excess of 3500m<sup>2</sup> we can stock a huge range of abrasives so that we can meet our customers requirements and deadlines.

Within our facility we have a dedicated abrasive laboratory. Stringent testing is completed on all batches, guaranteeing quality every time. All premium products are fully certified to the required standard.

Our technical sales force are experts in their field, helping our customers to choose not only the correct equipment but the most appropriate and cost effective abrasive for your application, assuring we provide the best level of knowledge and customer care to every job.



## Media Reprocessing and Disposal

At SurfacePrep we offer recycling of abrasives. We are committed to diverting abrasives from landfill and giving them a new lease of life. As a licensed waste broker/carrier, we work with a range of recycling plants and customers in order to find a variety of additional uses for your spent products. We are able to collect most materials, enabling your company to be more cost effective and environmentally friendly.

We can broker the collection, recycling and disposal of most spent media. This includes: fused alumina, bauxite, plastics, glass and many more. We can arrange for your waste material to be collected in any volume. This can range from as little as one pallet or a full truck load. Collections can take place from once a week/month or on an ad hoc basis. We realise that waste needs can change due to a variety of factors. The recycling process offers significant cost savings when compared to standard waste disposal and landfill options.



**We Deliver Results  
Beyond The Surface**



SurfacePrep UK  
36 Orgreave Drive  
Sheffield  
South Yorkshire  
S13 9NR

0114 254 0600

[hc.sales@surfaceprep.com](mailto:hc.sales@surfaceprep.com)

[HC.TotalCare@surfaceprep.com](mailto:HC.TotalCare@surfaceprep.com)

[www.surfaceprep.co.uk](http://www.surfaceprep.co.uk)

