SurfacePrep

# Abrasives

## Contents





## 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/cm³ | Standard | 1.4 - 2.5 mm |
| Bulk Density | 1.75g/cm³ | 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/cm³ | Coarse | 1.4 - 2.5 mm |
| Bulk Density | 1.45g/cm³ | 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/cm³ | S.C. | 0.1 - 0.6 mm |
| Bulk Density | 1.35g/cm³ | | |
| Hardness | 5 - 6 Mohs | | |
| Friability | High | | |
| Recyclability | None | | |
| Dust Levels | High | | |
| Colour | Beige | | |
| Media | Angular | | |
| Shape | | | |

•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/cm³ | Fine | 0.2 - 1.5 mm |
| Bulk Density | 1.5g/cm³ | Extra Fine | 0.2 - 0.7 mm |
| Hardness | 5 - 6 Mohs | | |
| Friability | High | | |
| Recyclability | None | | |
| Dust Levels | High | | |
| Colour | Multi | | |
| Media | Angular | | |
| Shape | | | |

•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/cm³ | Ultra Coarse | ~0.28 mm |
| Bulk Density | 2.2 g/cm³ | | |
| Hardness | 2.5 Mohs | | |
| Friability | High | | |
| Recyclability | None | | |
| Dust Levels | High | | |
| Colour | White | | |
| Media Shape | Angular | | |

•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/cm³ | Ultra Coarse | 1.18 - 3.35mm |
| Bulk Density | 0.53 g/cm³ | Coarse | 0.6 - 1.18 mm |
| Hardness | 3 Mohs | Medium | 0.15 - 1.18 mm |
| Friability | Very High | Fine | 0.15 - 0.3 mm |
| Recyclability | None | | |
| Dust Levels | Very High | | |
| Colour | Off White | | |
| Media Shape | Semi-Angular | | |

•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, compatibilty 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/cm³ | GAR-MAC8/16 | 2.36 - 1.18 mm |
| Bulk Density | 2.38 g/cm³ | 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/cm3 | BA12 | ~1.765 mm |
| Bulk Density | 1.64 - 1.88 g/cm3 | 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/cm³ | WA12 | ~1.765 mm |
| Bulk Density | 1.64 - 1.88 g/cm³ | 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 Shape | Angular | WA220 | ~0.058 mm |

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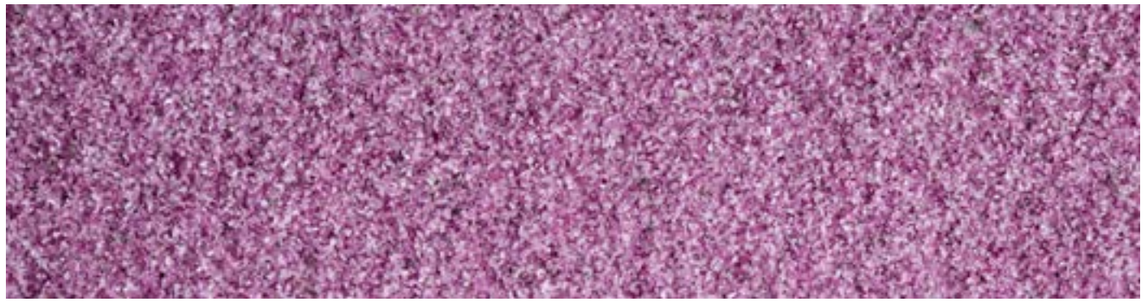


## Pink Aluminium Oxide

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/cm³ | PINK36 | ~0.525 mm |
| Bulk Density | 1.64 - 1.88 g/cm³ | 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 Shape | Angular | | |

•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/cm³ | GBBT3 | 0.590 - 0.840 mm |
| Bulk Density | 1.5 g/cm³ | 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 gcm³ | CG2000/3000 | 2.0 - 3.0 mm |
| Bulk Density | 1.5 g/cm³ | 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 & Coasted 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/cm³ | S/SS200 | 1.18 -2.00 mm |
| Bulk Density | 4.7 g/cm³ | 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 Shape | Spherical | S/SS20 | 0.075 - 0.355 mm |
| | | S/SS10 | 0.075 - 0.180 mm |

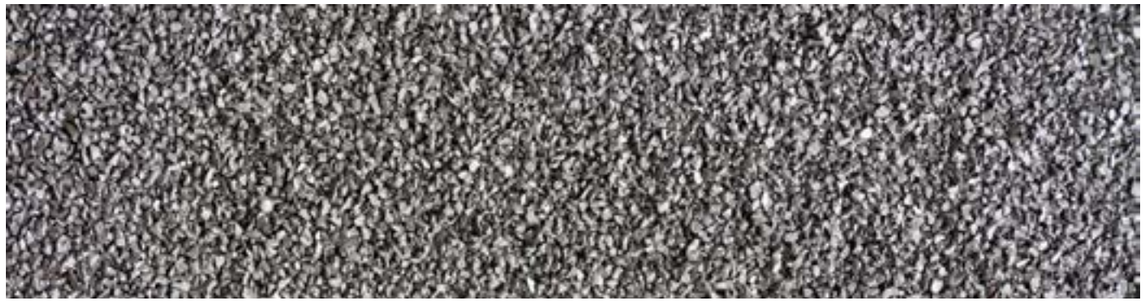
•Surface Preparation •Metals •Aerospace Castings •Alloy Wheel Repair & Refurbishment •Diffused & Plasma Coastings •Nuclear & Power Generation •Oil & Gas Industries •Peening •Ballast

## 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/cm³ | 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 Shape | Angular | S/SG20 | 0.125 - 0.355 mm |
| | | S/SG10 | 0.075 - 0.18 mm |

•Surface Finishing •Surface Preparation •Metals •Aerospace Castings •Alloy Wheel Repair & Refurbishment •Diffused & Plasma Coastings •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/cm³ | G47 | 1.20 - 1.70 mm |
| Bulk Density | 3.5 - 4 g/cm³ | 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 reuasable steel abrasive that can be used as an alternative to chilled iron or steel grit.

| Properties | | Grades | |
|---|---|---|---|
| Density | 7.8 g/cm³ | PRO23 | 0.71 mm |
| Bulk Density | 4.6 g/cm³ | 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/cm³ | T2 12/16 | 12/16 |
| Bulk Density | 0.7g/cm³ | 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 |

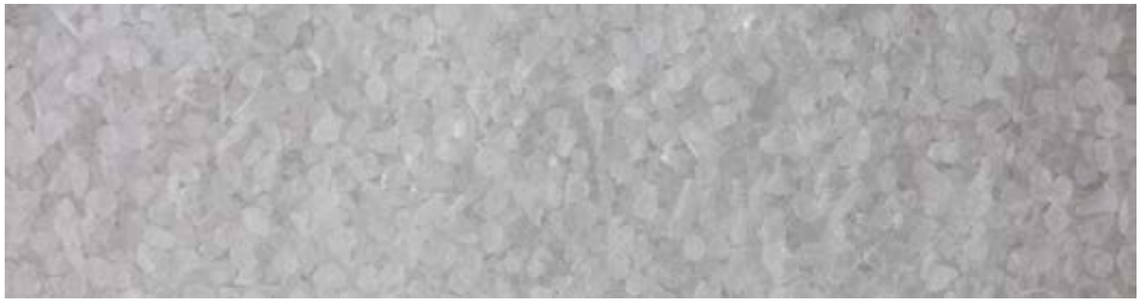
•Military •Automotive •Electronics •Graffiti Removal •Aerospace •Tyre & Rubber Applications •Plastic Moulding

## Avialite Type III

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

| Properties | | Grades | |
|---|---|---|---|
| Density | 1.4 - 16 g/cm³ | T3 12/16 | 12/16 |
| Bulk Density | 0.7 g/cm³ | 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/cm³ | T5 12/16 | 12/16 |
| Bulk Density | 0.58 - 0.65 g/cm³ | 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/cm³ | GEL2 | < 0.18 mm |
| Bulk Density | 0.7 g/cm³ | | |
| 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/cm³ | Contact us for part numbers | 2.00 mm |
| Bulk Density | 0.7g/cm³ | | 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/cm³ | BSC12 | ~1.765 mm |
| Bulk Density | 1.64 - 1.88 g/cm³ | 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/cm³ | BBAUX1-3 | 1 - 3 mm |
| Bulk Density | 1.3 - 1.4 g/cm³ | 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 Shape | Semi Angular | | |

•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/cm³ | EME5-3 | 3 - 5 mm |
| Bulk Density | 1.3 - 1.9 g/cm³ | 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 Shape | Semi-Angular | | |

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

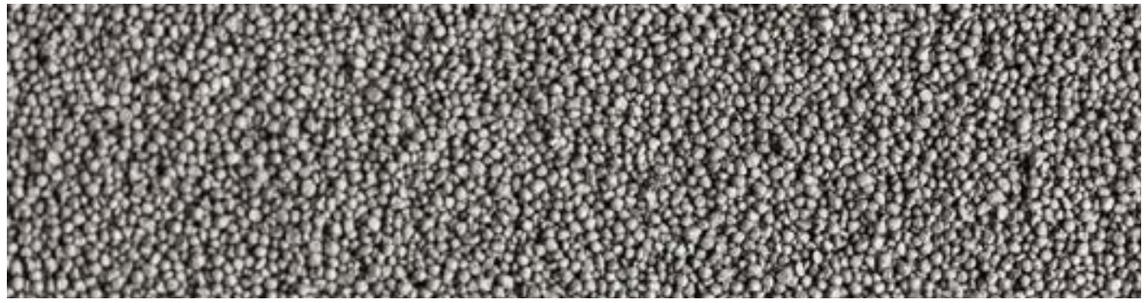


## Walnut Shell

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

| Properties | | Grades | |
|---|---|---|---|
| Density | 1 - 1.3 g/cm³ | Grade 1 | 1.0 - 2.5 mm |
| Bulk Density | 0.45 - 0.65 g/cm³ | 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, orginally 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/cm³ | SIN12/20 | 12/20 |
| Bulk Density | 2.2 g/cm³ | 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 | |
|---|---|
| Density | Variable on media type |
| Bulk Density | Variable on media type |
| Hardness | Variable on media type |
| Friability | Low/Medium |
| Recyclability | Medium |
| Dust Levels | Low |
| Colour | Variable on media type |
| Media Shape | Angular/ Irregular |

| Grades | |
|---|---|
| ESG17 | Chilled Iron 17 |
| ESA16 | Aluminium Oxide 14/24 |
| ESA30 | Aluminium Oxide 30/40 |
| ESA60 | Aluminioum Oxide 60/80 |
| ESA80 | Aluminium Oxide 80/100 |
| ESA120 | Aluminium Oxide 120 |
| ESA220 | Aluminium Oxide 220 |
| 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 producction continuity and the ability to produce the finest quality products. With a UK based warehouse space in excess of 3500m² 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.

SurfacePrep

**We Deliver Results**
**Beyond The Surface**

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