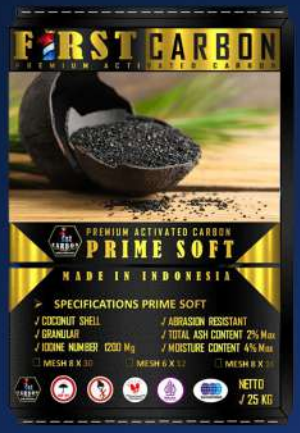
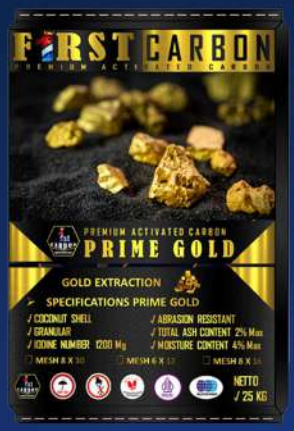
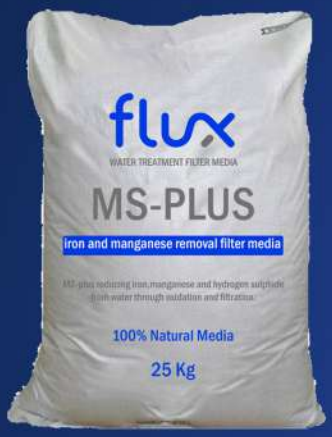
FILTER MEDIA

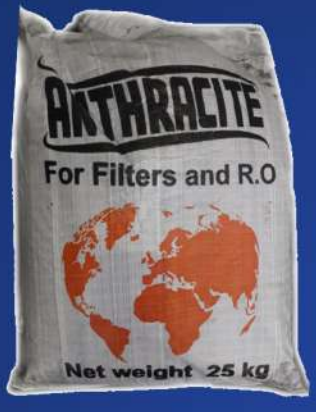
2025

EDITION FOR
REDAWATER GROUP



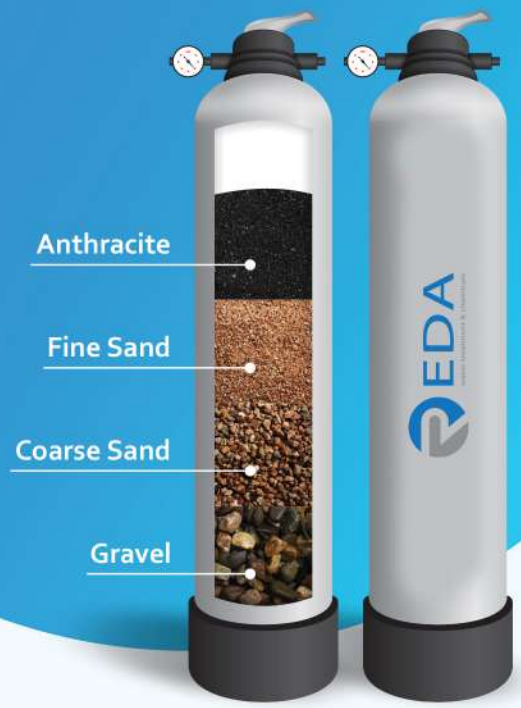






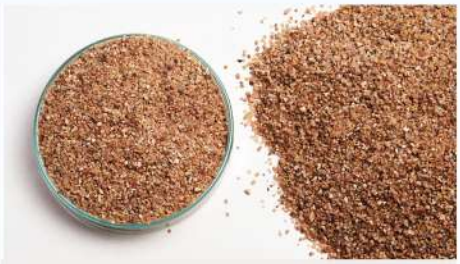
www.redawatergroup.com

Filter media that meets or exceeds IS , AWWA Bw100, NSF/ANSI 61 standards.

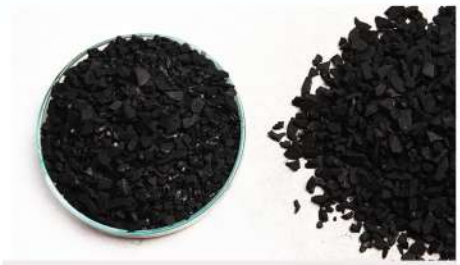


Our Products


Silica Sand


Natural Sand


Quartz Sand


Activated Carbon


Gravels


Anthracite


Ion Exchange Resins


Manganese Dioxide


Ph Correction Media

REDA
water treatment & chemicals

www.redawatergroup.com

Vessel Size مقاس الفيزل	Flow rate معدل التصرف	Pipe size قطر الماسوره	Multimedia Filter مالتي ميديا فلتر	Sand Filter فلتر رملي	Carbon Filter فلتر كربوني	Birm Filter فلتر بيرم	Softener سوفتنر
10 *54	**0.61 - 1.83** M3/H	**¾" – 1"**	**25** kg Gravel **25** Kg Sand **5** Kg Carbon	**25** Kg Gravel **50** Kg Sand	**25** KG Gravel **15** KG Carbon	**25** Kg Gravel **1** Ft Birm	**50** L Resin
13 *54	**1.04 - 3.12** M3/H	**¾ - 1"**	**35** kg Gravel **33** Kg Sand **10** Kg Carbon	**35** Kg Gravel **80** Kg Sand	**35** KG Gravel **25** KG Carbon	**35** Kg Gravel **1.5** Ft Birm	**70** L Resin
14 * 65	**1.19 - 3.59** M3/H	**1"**	**60** kg Gravel **60** Kg Sand **15** Kg Carbon	**50** Kg Gravel **125** Kg Sand	**50** KG Gravel **35** KG Carbon	**50** Kg Gravel **2.5** Ft Birm	**100** L Resin
16 * 65	**1.59 - 4.8** M3/H	**1"**	**85** kg Gravel **85** Kg Sand **20** Kg Carbon	**75** Kg Gravel **175** Kg Sand	**75** KG Gravel **45** KG Carbon	75 Kg Gravel **3.5** Ft Birm	**125** L Resin
18 * 65	**2.0 - 6.0** M3/H	**1"**	**100** kg Gravel **100** Kg Sand **25** Kg Carbon	**100** Kg Gravel **200** Kg Sand	**100** KG Gravel **60** KG Carbon	100 Kg Gravel **4.5** Ft Birm	**175** L Resin
21 * 62	**2.44 - 7.34** M3/H	**1"-1.5"**	**125** kg Gravel **125** Kg Sand **30** Kg Carbon	**125** Kg Gravel **250** Kg Sand	**125** KG Gravel **75** KG Carbon	125 Kg Gravel **5.5** Ft Birm	**200** L Resin
24 * 72	**3.56 - 10.72** M3/H	**1.5" – 2"**	**200** kg Gravel **200** Kg Sand **45** Kg Carbon	**200** Kg Gravel **350** Kg Sand	**200** KG Gravel **100** KG Carbon	200 Kg Gravel **7** Ft Birm	**325** L Resin
30 * 72	**5.56 - 16.74** M3/H	**1.5"-2"**	**275** kg Gravel **275** Kg Sand **75** Kg Carbon	**275** Kg Gravel **500** Kg Sand	**275** KG Gravel **150** KG Carbon	275 Kg Gravel **12** Ft Birm	**500** L Resin
36 * 72	**7.99 - 24.03** M3/H	**2"**	**400** kg Gravel **400** Kg Sand **100** Kg Carbon	**400** Kg Gravel **950** Kg Sand	**400** KG Gravel **225** KG Carbon	400 Kg Gravel **16** Ft Birm	**700** L Resin
48 * 72	**14.25 - 42.87** M3/H	**3"**	**700** kg Gravel **700** Kg Sand **175** Kg Carbon	**700** Kg Gravel **1350** Kg Sand	**700** KG Gravel **400** KG Carbon	700 Kg Gravel **29** Ft Birm	**1225** L Resin
63 * 67	**22.8 - 65** M3/H	**3" – 4"**	**750** kg Gravel **750** Kg Sand **250** Kg Carbon	**750** Kg Gravel **1350** Kg Sand	**750** KG Gravel **525** KG Carbon	750 Kg Gravel **34** Ft Birm	**1600** L Resin

ملحوظات مهمه اثناء التصميم

1- معدل السريان للفلتر يعتمد على سرعه الفلتره Velocity of Filtration (كلما زادت سرعه الفلتره زاد معدل السريان وقل حجم الفيزل"مساحه سطح الفلتر")

2- كلما زادت معدلات العكاره و SDI زاد حجم الفلتر ويجب تصميم معدل السريان اقل ما يكون لتزيد كفاءه الفلتر على الفلتره

3- حجم خزان الملح للسوفتنر يساوي حجم الريزن في الفيزل

4- شكاره البيرم = 1 قدم = 1 ft

PRIME SOFT 6X12

Coconut Shell Activated Carbon

Applications

Water treatment | Decoloration | Odor Control | Filters

Prime Soft 6x12 is for either regenerable or one-time use systems:

- Drinking treatment plant
- Ground water
- Filter element manufacturer
- Water processing
- Industrial processes

Description

FIRST CARBON the raw material is from coconut shell, which main purpose is the adsorption and purification; different specification purposes; The basic purpose is to clean air and clean water. Our clients are mostly used in food factory , beverage factory, power plant, water plant water purification and water softening;Industrial sewage purification treatment.

Specifications	Prime Soft6x12
Iodine number, mg/g	1100(min)
Moisture (As Packaged), wt%	5 (max)
Hardness Number,wt%	99(min)
Ash, wt%	2-4
Particle size > 12 mesh (1.70 mm) wt%	5 (max)
Particle size <6 mesh (3.36 mm) wt%	5 (max)

Packaging

Standard Packaging in 25 Kg Bag PP Bag with Inner Liner Activated Carbon (NOT REGULATED)

(HS Tariff Classification) CAS # 7440-44-0

Certificate

We are certified by BV, SGS, FDA, ISO9001, ISO14001, HALAL, CE , NSF etc.

MADE IN INDONESIA

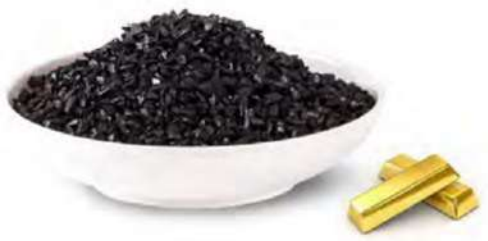
FIRST CARBON
PREMIUM ACTIVATED CARBON

PRIME GOLD 6X12
Granular

Introduction

· Prime Gold Gold Recovery Carbons are specifically designed for gold recovery operations and high efficiency in gold recovery operations (CIL & CIP)

6-12 MESH



Advantage:

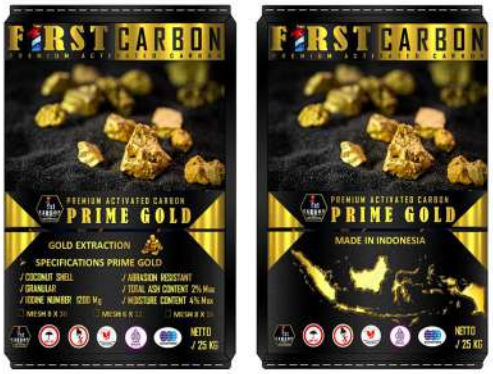
---High Hardness Specifications Lower carbon losses and therefore lower gold losses.

---High Adsorption Rate- Reduces solube gold losses,adjusts to ore tonnage and grade.

Specifications	Prime Gold 6x12
Mesh size(6X12) , wt%	90 (min)
Iodine number mg/g	1100(min)
Bulk density , g/cm3	0.49(min)
Surface area, (m2/g)	1150(min)
Ash, wt%	2 -5(max)
Hardness number, wt%	95(min)
CTC:%	60(min)

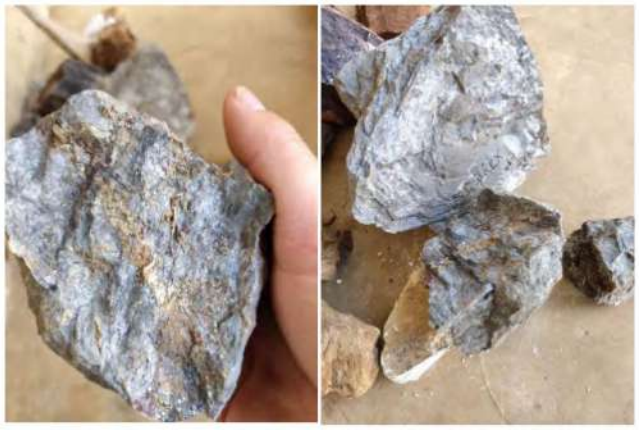
Packaging

Standard Packaging in 25 Kg /Bag or 550kg/Jumbo bag
HS Code: Classification: 3802.10.1000



Customer Case:

We have cooperated with Burkina Faso gold mining project , which recive good feedback for them



Certificate

We are certified by SGS, NSF FDA, ISO9001, ISO14001, HALAL, CE etc.

MADE IN INDONESIA

Anthracite

flux FILTER MEDIA®

Bulk Density	765 – 830 kg/m³
Hardness(MOH)	3 – 4
Wear Rate	1% max
Break Rate	1% max
Uniformity Co-efficient	≦ 1.4

Anthracite is a type of mineral coal which is high on carbon content and low on impurities. That is why it works as a highly dependable filter media. It makes the most cost-effective and durable filter beds with a wide temperature range. When compared to single media filter beds such as filter sand, anthracite offers an advantage. Fr example, an oil impurity can make backwash cycle longer by making it difficult to clean it. With a low uniformity coefficient, it not only offers an extended life of the filter, but it also ensures better flow rates by performing minorvariations in effluent turbidity in case of extreme influent turbidity.

CHEMICAL COMPOSITION

Carbon Content	80 – 90 %
Volatile Matter	6.5% max
Ash Content	7% max
Acid Solubility	3% max
Moisture	1.2 % max
Sulphur Content	0.85

GRADES/SIZES

0.6-1.2mm	1.0-2.0mm	2.0-3.0mm	3.0-7.0mm	4.0-8.0mm
0.8-1.2mm	1.2-2.4mm	2.0-4.0mm		
0.8mm-1.7mm	1.4-2.5mm	2.5-4.0mm		

CONDITIONS FOR OPERATION

Bed depth	24 – 36 inches
Freeboard	30% of bed depth (min.)
Backwash flow rate	18 – 25 gpm/sq.ft
Backwash bed expansion	20 -30 % of bed depth
Service flow rate:	5 gpm/sq.ft or higher depending upon local conditions.

PACKAGING

25 kg Bags / 1.2 Ton Jumbo Bags

MANGANESE GREENSAND

Manganese Greensand is formulated from a glauconite greensand and is capable of reducing iron, manganese and hydrogen sulphide from water through oxidation and filtration. Soluble iron and manganese are oxidized and precipitated by contact with higher oxides of manganese on the greensand granules. The hydrogen sulphide is reduced by oxidation to an insoluble sulphur precipitate. Precipitates are then filtered and removed by backwashing. When the oxidizing capacity power of the Manganese Greensand bed is exhausted, the bed has to be regenerated with a weak potassium permanganate (KMnO4) solution thus restoring the oxidizing capacity of the bed.

Conditions for Operation

Bed depth: 28-34 inches
Freeboard: 30% of bed depth (min.)
Backwash flow rate: 8-10 gpm/sq.ft.
Backwash bed expansion: 30% of bed depth
Service flow rate:
3-5 gpm/sq.ft.,8-10 gpm/sq.ft
Ph Range: 6.2 – 8.5
Regeneration : 60 gms of KMnO4 by weight per cft

Physical Properties

Color: Black
Moisture %: < 1
Acid Solubility: < 1 %
Specific Gravity: 2.00
Hardness Mohs: 5
Uniform Coefficients: < 1.7
Bulk Density, Kg/M3: 1325
Effective Size: 0.45 – 0.70 mm

Removal Capacity: Fe 25 ppm

Packaging : 25 / 38 Kgs HDPE Bag

GRAVELS / PEBBLES

Our water filter gravel and support pebble has the same properties as filter sand only difference being its shape which is highly spherical therefore promoting good flow and even distribution in support beds. Will maintain the quality of the treated water especially in the case of softeners as it is calcium free.

Support gravel, the lower strata of a filter bed, acts to support the media. Correct gradation and sizing must be calculated to properly support the filter media.

To insure a clean, quality product, our filter gravels are double washed to remove all clay, shale and inorganic impurities. High purity, consistent quality gravel makes this media ideal for filtration.

TYPICAL CHEMICAL ANALYSIS

Silica (Sio2)	92.87
Iron Oxide (Fe2O3)	3.42
Loss on ignition (LOI)	1.15
Aluminium Oxide (Al2O3)	1.45
Magnesium Oxide (MgO)	0.64
Calcium Oxide (CaO)	0.75
Titanium Dioxide (TiO2)	0.04
Sodium Oxide (Na2O)	0.05
Potassium Oxide (K2O)	0.06
Sulphur Trioxide (So3)	0.04
Barium Oxide (BaO)	0.01

Grade (Inches)	Size Range (mm)
2 ½ x 1 ½	63.5 – 38.0
1 ½ x 1	38.0 – 25.0
1 x ¾	25.0 – 19.0
¾ x ½	19.0 – 12.5
¾ x ¼	19.0 – 6.35
½ x ¼	12.5 – 6.35

CONDITIONS FOR OPERATION

Bed depth:18-30 in.
Freeboard:20% of bed depth (min.)
Backwash flow rate: 15-20 gpm/sq.Ft.
Backwash bed expansion: 20% of bed depth
Service flow rate:
Municipal: 1.5-2 gpm/sq.Ft.
Industrial: 3 gpm/sq.Ft.
Domestic: 5 gpm/sq.Ft.

PHYSICAL PROPERTIES

Color: Grey / Off White
Shape: Spherical / Sub - Angular
Acid Solubility: < 5 %
Specific Gravity: 2.60
Hardness Mohs: 7
Bulk Density, Kg/M3:1400 – 1700

PACKAGING

25 / 50 Kg HDPE Bag , 1 – 1.5 Ton Jumbo Bag

SAND

Our water filter sand is highly spherical therefore promoting good flow and even distribution in support beds. Will maintain the quality of the treated water especially in the case of softeners as it is calcium free.

Support gravel, the lower strata of a filter bed, acts to support the media. Correct gradation and sizing must be calculated to properly support the filter media.

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TYPICAL CHEMICAL ANALYSIS

Silica (Sio2)	92.87
Iron Oxide (Fe2O3)	3.42
Loss on ignition (LOI)	1.15
Aluminium Oxide (Al2O3)	1.45
Magnesium Oxide (MgO)	0.64
Calcium Oxide (CaO)	0.75
Titanium Dioxide (TiO2)	0.04
Sodium Oxide (Na2O)	0.05
Potassium Oxide (K2O)	0.06
Sulphur Trioxide (So3)	0.04
Barium Oxide (BaO)	0.01

Grade (B.S.S)	Size Range (mm)	E.S (mm)
16/30	0.50-1.00	0.50-0.71
14/25	0.60-1.20	0.63-0.85
10/18	0.85-1.70	0.85-0.95
8/16	1.00-2.00	1.05-1.27
6/14	1.20-2.80	1.25-1.60
5/8	2.00-3.35	2.00-2.70

CONDITIONS FOR OPERATION

Bed depth:18-30 in.
Freeboard:20% of bed depth (min.)
Backwash flow rate: 15-20 gpm/sq.Ft.
Backwash bed expansion: 20% of bed depth
Service flow rate:
Municipal: 1.5-2 gpm/sq.Ft.
Industrial: 3 gpm/sq.Ft.
Domestic: 5 gpm/sq.Ft.

PHYSICAL PROPERTIES

Color: Grey / Off White
Shape: Spherical / Sub - Angular
Acid Solubility: < 5 %
Specific Gravity: 2.60
Hardness Mohs: 7
Bulk Density, Kg/M3:1400 – 1700

PACKAGING

25 / 50 Kg HDPE Bag , 1 – 1.5 Ton Jumbo Bag

SILICA SAND

Silica sand or industrial sand is one of the most commonly used construction materials. This sand material is well sorted and contains the right amount of grains in a uniform amount. The uses of this sand depend solely on the physical characteristics and its purity.

Silica sand includes various physical properties such as the shape of the grain, size and distribution of the grain, strength and refractoriness. It is one of the most common elements found in the earth's crust. Although this material includes a simple chemical formula, it consists of various crystalline structures and shapes.

FEATURES

This chemical formula is hard and includes a high melting point which makes it ideal for various industrial purposes. It is also chemically inert and therefore it is widely used for glass making purposes. It is also used to manufacture ceramics. The incomparable strength of industrial sand and its non-reactive properties make it an ideal component in most of the industrial products manufactured every day.

APPLICATION

Some of the most common uses of industrial sand include the following.

- Ceramics
- Building products
- Production of glass
- Pigment
- Filtration of water
- Production of silicon carbide and silicon
- Sandblasting
- Foundry sand

Elements	Contents %
Silica (Sio2)	98.0 – 99.5
Iron Oxide (Fe2O3)	0.011
Loss on ignition (LOI)	0.044
Aluminium Oxide (Al2O3)	1.020
Magnesium Oxide (MgO)	0.016
Calcium Oxide (CaO)	0.136
Titanium Dioxide (TiO2)	0.010
Sodium Oxide (Na2O)	0.097
Potassium Oxide (K2O)	0.104
Sulphur Trioxide (So3)	0.04

Grade (B.S.S)	Size Range (mm)	E.S (mm)
16/30	0.50-1.00	0.50-0.71
14/25	0.60-1.20	0.63-0.85
10/18	0.85-1.70	0.85-0.95
8/16	1.00-2.00	1.05-1.27
6/14	1.20-2.80	1.25-1.60
5/8	2.00-3.35	2.00-2.70

Conditions for Operation

Bed depth:18-30 in.
Freeboard:20% of bed depth (min.)
Backwash flow rate: 15-20 gpm/sq.Ft.
Backwash bed expansion: 20% of bed depth
Service flow rate:
Municipal: 1.5-2 gpm/sq.Ft.
Industrial: 3 gpm/sq.Ft.
Domestic: 5 gpm/sq.Ft.

Physical Properties

Color: Off white / Snow White
Bulk Density, Kg/M3:1550
Solubility in 10% HCL: < 0.10
Specific Gravity: 2.67
Hardness Mohs: 7 - 8
Uniform Coefficients :< 1.6

Packaging: 25 / 50 kg HDPE Bags , 1 to 1.5 Ton Jumbo Bag