

POLISHING 7



About Hammons Products Company

Hammons Products Company is the world's largest processor of Black Walnuts. The wild nuts are grown throughout the Midwestern and East-Central United States. Every fall, individuals gather the Black Walnuts by hand and sell them to local buyers for delivery to Hammons. While the nutmeats are popular as flavorful food ingredients, the hard outer shell is ground into various sizes for use as a soft grit abrasive.

Since 1948, two years after its founding, Hammons Products has introduced Black Walnut shells to industrial and cosmetic companies worldwide. Today, we are the leading supplier of Black Walnut shell soft grit abrasives.

In addition to Black Walnut shells, we also offer Pecan, Apricot Pit and English Walnut shells. Our abrasive products are sold directly to our customers and through distributors.

HE SURFACE

Separator

Quality Products and Superior Service

At Hammons Products Company, we are dedicated to providing quality nut products and superior service. Over the years, we've enlarged our processing facilities and upgraded our equipment to stay ahead of increasing demand. Automated equipment processes millions of pounds of Black Walnut shell every year. Constant improvements and leading edge technology has enabled us to continually meet and exceed industry standards. In addition, Hammons implements several quality control measures to ensure that customer specifications are met.

Customer service is a top priority at Hammons. Our experienced sales personnel are willing to work with you and help determine the appropriate size of Black Walnut shell to fit your application. Our production team operates three shifts each day so that orders can be filled on a timely basis.

Left: Our state-of-the-art equipment produces excellent quality ground Black Walnut shell.

Right: Hammons nutshell processing plant produces millions of pounds of ground Black Walnut shell every year.

THE P SOFT GRIT







Hammons Black Walnut Shell

Ground Black Walnut shell is a hard, chemically inert, nontoxic, and biodegradable abrasive. It is processed from cleaned Eastern Black Walnut shells. Black Walnut shell has a wide variety of uses. Our soft grit abrasive is available in six primary sizes - 6/10, 8/12, 12/20, 20/30, 30/100, and -100. Upon request, we will grind special sizes to meet customer needs.

Blasting Away With Uses: The Multiple Applications

Blast Cleaning and Polishing

Ground Black Walnut shell is used as an abrasive media to polish and clean soft metals, fiberglass, plastics, wood, and stone. It is also used to tumble and polish gun casings, jewelry, ink pens, and metal parts. Black Walnut shell is an effective deburring product for moldings, castings, and electrical parts. In addition, it is used in barrel tumbling applications to clean and polish, as well as surface preparation for painting various parts and equipment.

Because of its resistance to breakdown, ground Black Walnut shell can be used many times to help lower cost. Black Walnut shell provides an excellent finish without scratches or pitting.

REMIER ABRASIVE

Oil Industry

Black Walnut shell is used as lost-circulation material in the oil well drilling industry. It is the key ingredient in making and maintaining seals in fracture zones and unconsolidated formations. Also, Black Walnut shell is an excellent filtration medium for separating crude oil from water.

Since Black Walnut shell is environmentally friendly, it is the perfect media for the oil industry.

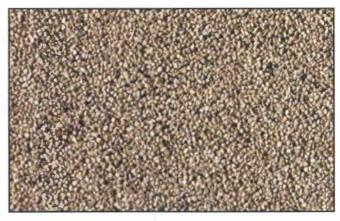
Fillers and Extenders

The dynamite industry was one of the first markets to utilize ground Black Walnut shell. It is used as filler in dynamite. In addition, Black Walnut shell flour is a filler used in plywood and other wood products as an adhesive ingredient. The nut shell flours are also fillers mixed with resins to do cold castings.

Cosmetics

Ground Black Walnut shell is the ideal soft grit abrasive for soaps, cosmetics, and dental cleansers. It is the gritty agent used to remove rough surfaces on skin and to polish dentures.

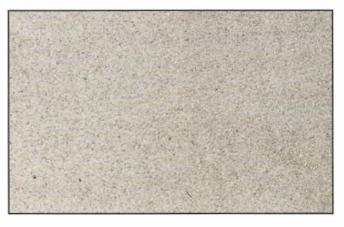
Black Walnut shell is a natural abrasive, pure and clean. It gives a smooth, soft finish making it excellent for skin and dentures.



20/30



30/100



IN A NU EFFECTIVE • F

Left: Grinding, sizing and bagging shell.



The Advantages of Hammons Black Walnut Shell

Cost Effective

- · Cleans precision parts without change in dimensions
- · Cleaned parts require no additional machining or fitting

Excellent Durability and Elasticity

- · Resistant to rupture and deformation
- · Harder than apricot pits, pecan shells and corn cobs
- · Limited breakdown, which allows you to reclaim and reuse

Environmentally Friendly

- · Requires no flammable solvents
- · Dust free
- · Nontoxic and biodegradable
- · Natural

Superior Finish

- · Cleans without leaving scratches or pitting on surfaces
- · Clean and pure

Fast

- · Surfaces require no additional drying time
- · Easy to use

TSHELL:

ST · DURABLE

Below: Hammons shell flour production.



Service

- · Year-round availability
- · Distributed worldwide

Convenient Packaging

- · Paper Bags
- · Boxes
- · Fiber Drums
- · Mini Bulk Bags

Physical Characteristics

Color Light Brown

Specific Gravity 1.2-1.4

Hardness 3 on MOHS scale

Moisture NMT 11% by weight

pH 7.5

GSA Specification AA-1722 Type 2

Military Specification MIL-G-5634 Type 3

Chemical Analysis

% by weight

Nitrogen 0.10

Cellulose 40/60

Lignin 20/30

Toluene Solubility 0.5/1.0

Methoxyl 6.5

Chlorine 0.10

Ash 1.5

Partical Size Sieve Information

Sieve Size	Opening		
U.S. Mesh	Inches	Microns	Millimeters
4	.187	4760	4.76
6	.132	3360	3.36
8	.0937	2380	2.38
10	.0787	2000	2.00
12	.0661	1680	1.68
14	.0555	1410	1.41
16	.0469	1190	1.19
18	.0394	1000	1.00
20	.0331	840	0.84
30	.232	590	0.59
40	.0165	420	0.42
60	.0098	250	0.250
80	.0070	177	0.177
100	.0059	149	0.149
200	.0029	74	0.074
325	.0017	44	0.044

For more information contact Hammons today, or our local distributor.



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FINISHINGSYSTEMS

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