

Glennris

COMPANY INTRO

Glanris

turns **rice husks** into an
economical, environmentally
friendly biochar we call

BiocarbonTM

WHY RICE HUSKS



Scalable: Over 220 billion pounds per year of rice husks are generated globally

Biocarbon reduces GHGs created by : **burning hulls in the fields (CO₂) or allowing them to rot (Methane).**

Rice husks **have unique chemistry.**

Our Biocarbon is activated for water treatment – the unique chemistry and silica content of the husks **allows for metals removal from water.**

Applications



Residential
Water



Industrial
Water



Municipal
Water



Soil Amendment



Asphalt & Concrete



Environmental remediation

Rice Husk Biochar for Water Treatment

Multiple mechanisms for contaminant removal

- Cation exchange
- Adsorption
- Complexation
- Coprecipitation
- Electrostatic attraction



Why Glanris for water?

Biocarbon

Typical Activated Carbon

- EFFECTIVELY REMOVES METALS ❌
- EFFECTIVELY REMOVES ORGANICS ✅
- SUSTAINABLY SOURCED ❌
- SUSTAINABLY PRODUCED ❌
- ECONOMICAL ✅
- FREE OF MICRO-PLASTICS ✅

Activated Carbon

\$8.23 billion

11.46% CAGR

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Ion Exchange Resin Beads

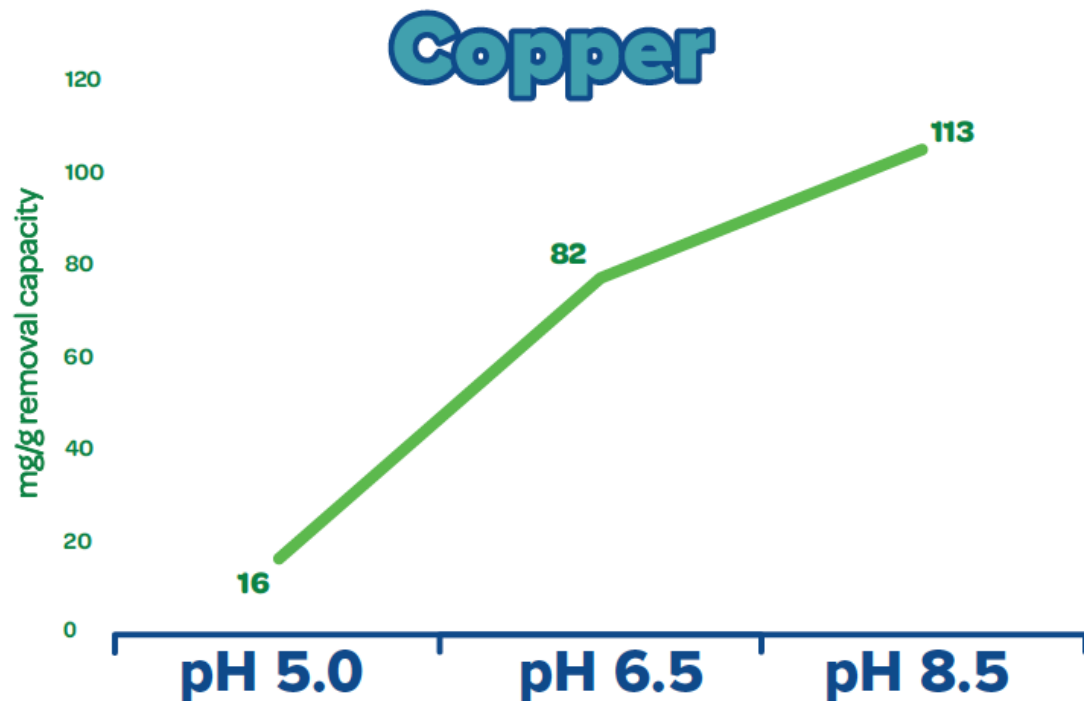
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Ion Exchange Resins

\$3.4 billion

7.3% CAGR

Test Results



METAL REMOVAL CAPACITY (mg/g)

Pb	Cu	Fe	Zn	Ba	Cd
37	16	24	20	13	12

Cost Comparison



\$15
-
\$30

**TRADITIONAL
GRANULAR
ACTIVATED
CARBON (GAC)**

\$35
-
\$50

**MORE ESOTERIC
ACTIVATED
CARBON (BONE
CHAR)**

\$100
-
\$300

**TYPICAL METAL
REMOVING ION
EXCHANGE RESIN**

\$100
-
\$1000

**PRICES PER CUBIC FOOT
(WHOLESALE, BEFORE SHIPPING)**

“

Glanris has developed a process to turn rice hulls into water filtration media – a cleantech solution that has the **potential to transform both the rice and the water management industry**



USA
TODAY



”

Operations

Patented process for
manufacturing Biocarbon™

Capabilities:

3 tons a day of finished media on a
single line, can expand to 30 tons/day

Room for up to 8 machines in
60,000 s.f. facility

Engineering

Onsite analytical capabilities

New Products in the Lab:

Arsenic and phosphate
10x capacity on metal removal

University & industry affiliations

Pelletizing to improve kinetics + flow

2 US patents issued

(process and material)
Process patents in China + Japan

IBI Certified. NSF 61 Certified

THANK YOU !



Glanris

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