

Drinking Water Treatment Media

Calcium Carbonate Products

**North
America**



Live Safer.™



QUALITY DRINKING WATER TREATMENT MEDIA

For corrosion control, pH adjustment and remineralization

Acidic waters slowly dissolve calcium carbonate media on contact to raise the pH. This reduces the potential leaching of copper, lead, and other metals found in typical plumbing systems. Periodic backwashing will prevent packing and maintain service rates. As calcite neutralizes water, it increases the hardness of the water.

Conditions for Operation:

- Gravel support bed is recommended
- Water pH range: 5.0-7.0
- Typical CaCO_3 bed depth: 30 in.
- Minimum freeboard: 50% of bed depth
- Backwash rate: 8-12 gpm/sq. ft.
- Backwash bed expansion: 35% of bed depth
- Service flow rate: 3-6 gpm/sq.ft. (varies depending on local conditions)



Common Uses:

- pH adjustment
- Corrosion control
- Remineralization of desalinated water

Key Benefits:

- Uniform particle size
- Cost effective
- Slower reacting



IMERYS NSF[®] CERTIFIED CALCIUM CARBONATE PRODUCTS

Imerys' NSF Certified Calcium Carbonate media, also known as calcite, is prepared from naturally occurring, high-quality marble.

In private water systems, one of the most common causes of corrosion is low pH (< 7.0) water. Treatment is accomplished by neutralizing the water. The most common method is to pass acidic water through granular calcium carbonate.

Many forms of calcite media are available on the market. However, not all are safe for use in drinking water. Imerys' calcium carbonate products have been tested and certified by NSF International to NSF/ANSI Standard 60. Imerys chooses to work with NSF International to help ensure you and your customers live safer.

TYPICAL PROPERTIES

GRADE	40-200 WT	Z WHITE WT	30-50 WHITE WT	XO WHITE WT	OZ WHITE WT
Source	Marble Hill, GA/ Sylacauga, AL	Marble Hill, GA	Marble Hill, GA	Marble Hill, GA	Marble Hill, GA
Mesh	1% Plus 40	1% Plus 40	1% Plus 30	1% Plus 16	1% Plus 6
% CaCO ₃	94/95	95	95	95	95
% Acid Insolubles	2	2	2	2	2
% SiO ₂	0.3	0.3	0.3	0.3	0.3
% Moisture	0.15	0.15	0.15	0.15	0.15
Hardness (Mohs)	3	3	3	3	3
Index of Refraction	1.6	1.6	1.6	1.6	1.6
Specific Gravity	2.7	2.7	2.7	2.7	2.7
Solid Density (lb/gal)	22.7	22.7	22.7	22.7	22.7
Bulk Density					
- Loose	90	95	90	90	85
- Packed	105/115	105	105	105	95

WORLD LEADER IN MINERAL-BASED SPECIALTY PRODUCTS FOR INDUSTRY



TAKE HEART

The World Health Organization (WHO) examined the impact of drinking water on human health.

Their report concluded:

- The hypothesis that consumption of hard water is associated with a somewhat lowered risk of cardiovascular disease is probably valid.
- Stabilization of demineralized and corrosive drinking water should be done where possible with additives that will increase or re-establish calcium and magnesium levels.

Source: World Health Organization. *Calcium and Magnesium in Drinking Water*, 2009.

Customer-Driven

Imerys works actively with customers to develop new and innovative solutions to solve their technical challenges. As a global leader in white minerals, Imerys brings its unique knowledge, technology and unrivaled depth of application expertise to improve the value of our customers' products.

New Product Development

Imerys is continuously creating new and better ways to transform mineral resources into high-performance, solution-driven products.

Environmental Policy

Imerys is committed to being a good neighbor to our environment and we take this responsibility very seriously. We have adopted the principles of Sustainable Development, which includes extensive training programs and considerable investment in environmental performance improvement.



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