

PURIFY YOUR CANE AND LIQUID SUGAR WITH PURIT[®] ULTRA MEDIA

PURIT ULTRA media provides exceptional filtration and color removal of liquid sugar resulting in higher throughput and reduced operating costs.

The challenge

Liquid sugar, a concentrated solution of refined granulated cane or beet sugar, is a key ingredient in the beverage industry for making carbonated soft drinks and other flavored beverages. Because off-taste and color consistency can influence consumer buying decisions, soft drink producers have very stringent quality requirements for the liquid sugars used in carbonated beverages. The ideal finished product is usually a 65°Bx syrup with a neutral sugar taste and odor, low color (water clear) and free from turbidity.

Our solution

Activated carbon is used to decolorize cane sugar syrups by adsorption of plant pigments (polyphenols) from the sugar cane and colors, such as melanoidins and caramels, created during processing. In addition to color removal, activated carbon also has the capability to remove non-colorant impurities, such as amino acids and polysaccharides.

Our activated carbons can help customers use fewer processing additives, resulting in increased productivity and lower processing costs. Media products, such as PURIT ULTRA media is a moist, low-dusting, multi-functional product that delivers excellent filtration and decolorization of dark and light color sugar syrups. PURIT ULTRA media is ideal for use in liquid sugar and other liquid purification processes that benefit from longer cycle times. PURIT ULTRA media is Kosher and Halal certified, and meets the requirements of the latest version of the Food Chemicals Codex.

Benefits

- ◆ Delivers excellent filtration resulting in increased cycle times, higher throughput, and fewer changeouts
- ◆ Offers higher decolorization of cane and beet sugar-based liquid sugar
- ◆ Neutral pH to avoid sugar inversion
- ◆ Dust free dosing

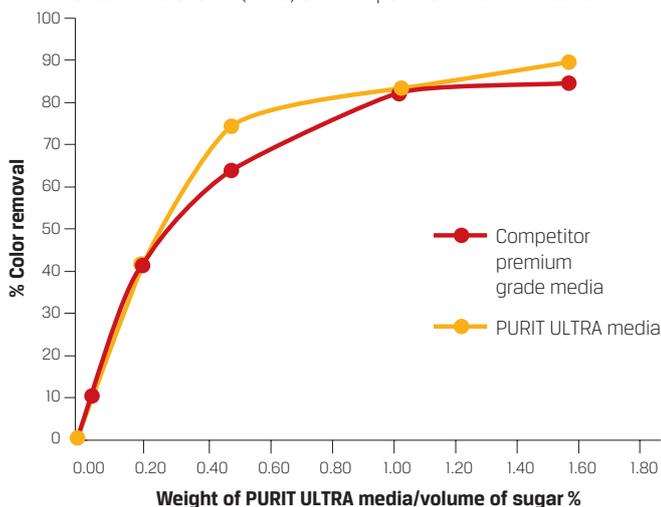


PURIT® ULTRA media performance data

The balance between filterability and decolorization is critical to performance. The graphs below demonstrate results from color removal. When evaluated under controlled conditions to eliminate variability from incoming raw material, these laboratory test results show our multifunctional product achieved equal to or better color removal.

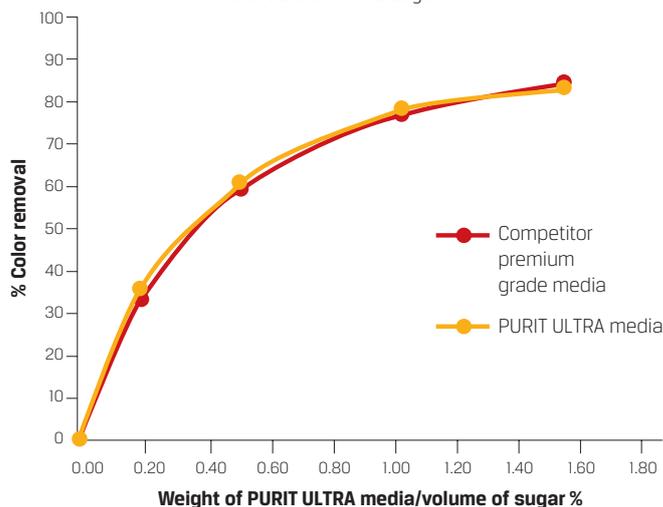
Reducing sugar A. 1050IC to 300IC at 72% color removal target

To achieve 72% color removal, only 0.4 (units) of PURIT ULTRA media is needed whereas 0.7 (units) of a competitive material is needed.



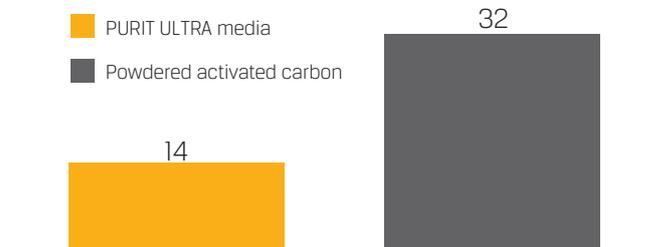
Reducing sugar B. 1050IC to 300IC at 72% color removal target

Performance will vary depending on the amount of starch and dextran in the sugar.



The graph at right shows filtration performance of our PURIT ULTRA media versus standard PAC. In this lab test, pressure is measured after ten cycles of liquid sugar. After ten cycles, the PSI for PAC is 32PSI versus 14PSI for our media. This minimal pressure drop from our media allows longer filter press run rates.

PSI measured after ten cycles of liquid sugar



Complete purification solution

In addition to PURIT ULTRA media, we offer NORIT® activated carbons for dark and light color removal as well as taste and odor adjustment. See the product selection guide below.

Product selection guide

Challenge	Suggested product	Product type
Dark color removal (1100IC to 50IC), excellent filtration	PURIT ULTRA media	Media
Dark color removal (1100IC to 50IC)	NORIT KB EVN	PAC
Light color Removal (350IC to 50IC)	NORIT CNI	PAC
Taste and odor adjustment, light color removal	NORIT PN 2	PAC

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