

Technical Data Sheet



PRODUCT: FRS-W Product Line

Sugar Processing and Purification: Clarification in Sugar Refineries

DESCRIPTION

Carbo-UA FRS-W Product line are patent-pending powder concentrated phosphoric acid derivatives with proprietary activation, specifically designed for outstanding clarification of sugar liquors/syrups.

The products are formulated for use as a body-feed or batch contact addition prior to Flotation Clarification, after Carbonatation, or as a stand-alone Clarifying agent to provide substantially improved production efficiency and product quality via its ability to remove a wide array of impurities such as colour, ash, and turbidity constituents. For the phosphatation process, **Carbo-UA FRS-W products** are best added at or near the Melt Station, with 5 - 15 minutes contact time prior to the addition of any other phosphatation chemical. For the carbonatation process, CarboUA FRS-W products are added after the 2nd stage saturator so that it can react with the carbonated liquor prior to the 1st-filtration stage.

The **FRS-W products** can also be added after the phosphatation clarifier or in-between the 1st and 2nd stage filtration in carbonatation refineries as a 2-stage treatment process for maximum decolourisation. **CarboUA FRS-W products** complex with the lime addition of phosphatation or Carbonatation, and therefore do not require a separate filtration stage.

The unique properties of **FRS-W** can enable a reduction in un-reacted lime to reduce ash and scaling problems associated with calcium. Additionally, **FRS-W products** have been formulated to reduce the colour increase normally associated with evaporative processes such as those that occur in the crystallization process.

GENERAL SPECIFICATIONS

Sugar	15 % min
Decolourisation:	(250 ppm on sugar in liquor)
pH:	4 – 6.5 (1.0% in water) pH can be adjusted for application requirements
Arsenic:	3 ppm max. (FCC Method)
Lead (Pb):	4 ppm max. (FCC Method)

FOOD GRADE CERTIFICATIONS

Carbo-UA FRS-W products meet the requirements of the US FDA for sugar processing under certain conditions, and all applicable raw materials meet the requirements of the *Food Chemical Codex*, fourth edition.

KOSHER CERTIFICATION

Carbo-UA product FRS-W products are Kosher approved.

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General specifications are typical values for this product. Customized product specifications on individual customer's feed stocks can be tailored to insure performance consistency on an individual customer basis. Since the use of our products by others is beyond our control, no guarantee, expressed or implied, is made and no responsibility assumed for the use of this product and product information, or the results obtained there from.

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