



SUGAR & ETHANOL PRODUCTS



CATEGORY	PRODUCT	CHARACTERISTICS
MICROBICIDES & SANITATION AIDS	BUSAN® 1021	Broad spectrum microbicide which is dithiocarbamate based, applied directly into the juice at 7.5 mg/l based on cane crushed. Effective against contamination by dextran forming bacteria, <i>Leuconostoc mesenteroides</i> and <i>Bacillus stearothermophilus</i> .
	BUSAN® 1046	A quaternary ammonium based spray sanitiser which is effective in reducing sucrose losses caused by bacteria and fungi. Applied as a 5% aqueous dilution for equipment sanitation. It is effective against <i>Leuconostoc mesenteroides</i> . It can be applied directly into the juice at 0.1mg/l based on cane crushed. Kosher and Halaal certified.
	BUSAN® 1178 Mill Sanitation Fermentation	A broad-spectrum microbicide that is effective for the control of the bacteria and fungi as well as troublesome slime and bad odours originating during the processing of cane sugar juices. Effective against contamination by dextran forming bacteria, <i>Leuconostoc mesenteroides</i> and <i>Bacillus stearothermophilus</i> . Also used in the fermentation process for effective control of bacteria, wild yeast, and fungi.
	BUSAN® 94	A broad spectrum organo bromine (DBNPA) based microbicide that is effective in controlling bacteria, fungi and wild yeasts. Can be used for treating pre-fermentation molasses or make-up water against unwanted microbiological contamination thereby increasing alcohol production. Very efficient at dosages of 10 to 20mg/l based on volume.
FLOCCULANTS FOR JUICE CLARIFICATION	BUFLOC® 5210	Flocculant for juice clarification. An anionic product with a high molecular weight and high charge density. Very efficient at dosages of 1 to 5mg/l based on juice volume. Kosher and Halaal certified.
	BUFLOC® 5288	Flocculant for juice clarification. An anionic product with a high molecular weight and medium charge density. Very efficient at dosages of 1 to 5mg/l based on juice volume. Kosher and Halaal certified.
	BUFLOC® 5667	Flocculant for juice clarification. An anionic product with an ultra-high molecular weight and high charge density. Very efficient at dosages of 1 to 5mg/l based on juice volume, in mixed juice applications. Kosher and Halaal certified.
	BUFLOC® 5774	Flocculant for juice clarification. An anionic product with a high molecular weight and medium to high charge density. Very efficient at dosages of 1 to 5mg/l based on juice volume, in mixed juice applications. Particularly well suited to processes using the short retention SRI clarifiers. Kosher and Halaal certified.
	BUFLOC® 5775	Flocculant for juice clarification. An anionic product with a high molecular weight and medium to high charge density. Very efficient at dosages of 1 to 5mg/l based on juice volume, in mixed juice applications. Particularly well suited to processes using the multi-tray clarifiers such as the Dorr, Graver, Bach and RapiDorr technologies. Kosher and Halaal certified.
FLOCCULANTS FOR SYRUP AND REFINERY CLARIFICATION	BUFLOC® 5275	Flocculant for syrup clarification. An anionic product with a high molecular weight and medium charge density. Very efficient at a dosage of 10mg/l based on Brix. Kosher and Halaal certified.
	BUFLOC® 5615	Flocculant that is extremely effective in phosphatation applications. Also effective in syrup clarification applications. An anionic product, low molecular weight and low charge density. Very efficient at dosages of 8 to 10mg/l based on Brix in refinery liquor applications. Kosher and Halaal certified.

COLOUR REMOVAL	BULAB® 5031	Highly cationic liquid polymer that is effective in the removal of visual colour and turbidity in sugar refinery processes. The high charge density and high molecular weight makes it very efficient at dosages up to 300mg/l based on Brix in colour removal applications. Kosher and Halaal certified.
	BULAB® 5154	An advanced cationic polymer highly effective in the removal of visual colour, turbidity and organic impurities in sugar refinery processes. A specific charge density and molecular weight makes it very efficient at dosages from 50 to 250mg/l based on Brix in colour removal applications. Kosher and Halaal certified.
	BULAB® 5908	Highly cationic liquid polymer that is effective in the removal of visual colour and turbidity in sugar refinery processes. A specific charge density and molecular weight makes it very efficient at dosages from 50 to 250mg/l based on Brix in colour removal applications. Kosher and Halaal certified.
MUD CONDITIONING	BULAB® 5031	A highly cationic, liquid flocculant that is effective in mud conditioning for the juice application to improve mud handling and POL recovery in Oliver Filter applications. Very efficient at dosages of 5 to 10 mg/l when applied to the clarifier mud pump. Kosher and Halaal certified.
EVAPORATOR SCALE CONTROL	BULAB® 7038	Anionic sodium polyacrylate based dispersant and scale inhibitor for multi effect evaporators and juice heaters. Very effective in the control of calcium scale at a continuous dosage of 8mg/l based on clear juice volume. Kosher and Halaal certified.
BOIL OUT ADDITIVE	BUSPERSE® 47	Highly active surfactant based dispersant used to improve the efficiency of boilout solutions for cleaning. It increases penetration, dispersion and dissolution when added to caustic or acid boilout solutions at concentrations of 0.1%. It reduces the amount of caustic or acid required whilst minimizing the need for a corrosive acid cleaning cycle. It can also reduce or eliminate the need for manual cleaning with brushes.
DEFOAMER/ ANTI FOAM	BUBREAK® 4019	High quality blend of mineral oil, wax and polyglycol for foam control in alcohol fermentation, refinery melt liquor and syrup. Very effective at dosages of 10 to 15mg/l based on volume. Kosher and Halaal certified.
	BUBREAK® 4019A	A highly active defoamer for use in controlling foam in effluent and cooling water systems. BUBREAK 4019A has been specially formulated to produce high defoaming efficiency with long-lasting life. Very effective at dosages of 10 to 15mg/l based on volume.
VISCOSITY DEPRESSANT	BUPAN®	High quality surfactant to lower the viscosity of massecuite and syrup in vacuum pans and centrifuges. It is used as a processing aid in sugar factories in the production of unrefined cane sugar. Kosher and Halaal certified.
ENZYME TECHNOLOGY	Dextranase Plus L	Enzyme to facilitate degradation of the dextran polysaccharide in sugar juice, syrup and refinery melt to improve factory performance and recoveries. This is facilitated by breaking the large Dextran molecule into shorter fragments and reducing the viscosity of the high Brix liquor at dosages of 1 to 3mg/l on thin juice volume or 60 to 80mg/l on Brix in syrup or refinery melt.
	Termamyl 2X	Heat stable enzyme to facilitate the hydrolysis of starch in sugar juice, syrup and refinery melt to improve factory performance, sugar recovery and customer specification. High levels of starch is responsible for poor crystal agglomeration and subsequent poor filterability. The product is effective at a dosage of 1 to 1.5mg/l based on crushed cane to an evaporator where the temperature is between 93 and 95°C, or in the refinery at a dosage of 5 to 15mg/l based on melted sugar.