BlendTech Blending Procedure

Date: November 17, 2010

Document Description: Blending Procedure for BTUCA (any dye color)EG Concentrate

Formulation: @60°F

	Relative Density	% By Volume	10,000 Gallon Blend
	mg/L		Gal
1. Ethylene Glycol	1.1155	97.80	9780
2. BTUCA	1.2950	2.20	220
Total:	1.1194	100	9900*

Blend Procedure:

- Determine temperature of EG in storage tank. If EG is measured by volume, take into account the changes of density at different temperatures. Maintain good mixing.
- 2. Adjust pH to 9.0 using sodium hydroxide or potassium hydroxide.
- 3. Slowly pump in proper amount of BTUCA blending syrup into the tank. Note: Drummed BTUCA must be stored @ 60°F or above. Should BTUCA crystallize in the drum due to low temperature storage, heat the drum to 80°F - 90°F, and mix thoroughly until crystals completely redissolve.
- 4. Mix further for at least one hour. Check for proper pH ($\frac{10 \text{ to } 10.75}{10 \text{ to } 10.75}$). Adjust as required.

*Total gallons do not add to 10,000 because volume shrinks when different liquids are mixed together.

Quality Control Limits

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Product: BTUCA EG Concentrate

Tests:	ASTM	Spec Limit
Specific Gravity, 60°F	D-1122	1.114 - 1.128
рH	D-1287	10.0 - 10.8
Freeze Point	D-3321	-37°C max.
Nitrite	D-5827	1400 ppm