

**Blend Tech Blending Procedure**  
**BT PG HTF**

Date: 3/9/21

Document Description: Blending Procedure for BT PG HTF (any dye color) PG 50/50 Premix

Formulation: @60°F

|                           | Relative<br>Density<br><br>mg/L | % by Volume | 10,000<br>Gallon<br>Blend<br>Gal |
|---------------------------|---------------------------------|-------------|----------------------------------|
| 1. Propylene Glycol       | 1.1155                          | 47.5        | 4750                             |
| 2. Demineralized<br>Water | 1.0000                          | 50.0        | 5000                             |
| 3. BT PG HTF              | 1.3100                          | 2.5         | 250                              |
| <b>Coolant Total:</b>     | 1.0716<br>nominal               | 100.00      | 9900*                            |

**Blend Procedure:**

1. Temperature of Water, PG and Inhibitor should be at least 60° F. Assure that the Inhibitor has been mixed until homogenous. Fluids should be combined gradually while the batch is being agitated. If PG is measured by volume, take into account the changes of density at different temperatures. Maintain good mixing.
2. Adjust pH to 9.0-9.5 using sodium hydroxide or potassium hydroxide.
3. Slowly add in proper amount of demineralized water. Mix thoroughly.
4. Slowly add the specified amount of BT PG HTF (2.50% by volume) blending syrup into the tank. Next, blend the solution well. After mixing BT PG HTF syrup and the PG-water well, Note: Drummed BT PGHTF must be stored @ 60°F or above. Should BTPGHTF crystallize in the drum due to low temperature storage, heat the drum to 80°C - 90°F, and mix thoroughly until crystals completely redissolve.
5. Mix further for at least one hour. Check for proper pH (9.5 to 10.8). Adjust as required.

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

**Quality Control Limits**

Date: April 23, 2021

Product: BT PG HTF PG 50/50 Premix

| Tests:                 | ASTM   | Spec Limit    |
|------------------------|--------|---------------|
| Specific Gravity, 60°F | D-1122 | 1.060 - 1.080 |
| pH                     | D-1287 | 9.5 - 10.8    |
| Freeze Point           | D-3321 | (-24°F) max.  |