# **Blend Tech, Inc.**

#### MANUFACTURING PROCEDURE

# **BTNN80** / Dilution Procedure

# <u>Light duty</u> concentrated coolant and the Pre-Diluted 50/50 mixture can be prepared according to the following instructions:

#### **1.1. Engine Coolant Concentrated:**

Combine and agitate BTNN80 (6.10% v/v) and ethylene glycol (94% v/v) at room temperature until the mixture is clear. Take a sample for control.

PARAMETERS OF CONTROL				
Characteristic	Method	Specification		
Specific Gravity at 15.5°C	ASTM D-891	1.110 – 1.145		
pH at 25°C, 50% vol % in distilled water	ASTM -1287	7.5 – 9.0		

Filter and drumming.

## 1.2. Engine Coolant Prediluted (50/50):

It can be prepared either according to Part A or according to Part B.

#### 1.2.1. Part A (from Engine Coolant Concentrated):

Blend (50% v/v) Engine Coolant Concentrated (prepared according to item 1.1.) with water (50% v/v) according to the specification reported in item 1.3.2.. Stir the mixture at room temperature until homogenization. Take a sample for control.

PARAMETERS OF CONTROL			
Characteristic	ASTM Test Method	Specification	
Specific Gravity at 15.5°C	D-891	1.0700 - 1.0770	
pH at 25°C	D-1287	7.5 – 9.0	

# PARAMETERS OF CONTROL

Filter and drumming.

#### 1.2.2. Part B (from BTNN80):

Blend with stirring at room temperature ethylene glycol (47% v/v), water (49.95% v/v) and BTNN80 (3.05% v/v) until homogenization. A lightly turbidity is normally observed which disappears in short time. Take a sample for control.

PARAMETERS OF CONTROL				
Characteristic	ASTM Test Method	Specification		
Specific Gravity at 15.5°C	D-891	1.0700 - 1.0770		
pH at 25°C	D-1287	7.5 – 9.0		

Filter and drumming

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# **1.3. Specification (Mandatory Information):**

1.3.1. Monoethyleneglycol:

Property	ASTM Test Method	Specification
Relative Density a 15.5°C	D-891	1.115 – 1.118
Water, mass %	D-1123	< 0.5
Chloride, ppm	D-3634	< 5
Purity, mass %	E-202	99.9
Distillation, 760 mm, °C, I.B.P.	D-1078	> 190
Dry Point		< 235

These methods are referenced in Test Methods E-202

# 1.3.2. Water Quality Limits:

Property	ASTM Test Method	Specification
Iron, ppm	E-394	< 1
Total Hardness, ppm	D-1126	< 20
Chloride, ppm	D- 512 / D-4327	< 25
Sulfate, ppm	D-516 / D-4327	< 50
рН	D-1293	5.5 – 8.5

1.3.3. Recommended Filter Characteristic:

Material: Acrylic-Phenolic resin Porosity: 5 microns

## NOTE: CELLULOSIC MATERIALS ARE NOT RECOMMENDED.