Issue Date: 11/24/2014

ENTERPRISE PRODUCTS OPERATING LLC

MAPL Ethane/Propane Mix Specifications

COMPONENT	TEST METHOD	SPECIFICATION
Methane	ASTM D-2163	1.5 Liq. Vol.% max.
Ethane	ASTM D-2163	75.0 - 82.0 Liq. Vol.%
Ethylene	ASTM D-2163	1.5 Liq. Vol.% max.
Propane	ASTM D-2163	11.5 - 25.0 Liq. Vol.%
Propylene	ASTM D-2163	1.0 Liq. Vol.% max.
Butanes & Heavier	ASTM D-2163	0.8 Liq. Vol.% max.
Carbon Dioxide	ASTM D-2504	1000 ppm wt. max.
Copper Corrosion Strip @ 100 °F	ASTM D-1838	No. 1 (See notes 1 & 2)
Volatile Sulfur	ASTM D-5623	30 ppm wt. max.
Hydrogen Sulfide	ASTM D-5623	2 ppm wt. max.
Carbonyl Sulfide (COS)	ASTM D-5623	2.5 ppm wt. max.
Water Content	ASTM D-5454	30.0 ppm wt. max.

NOTE ON TEST METHODS: Method numbers listed above, beginning with the letter "D," are American Society for Testing and Materials (ASTM), Standard Test Procedures. The most recent year revision for the procedures will be used.

Contaminants: Ethane-Propane Mix shall be commercially free from sand, dust, gums, and gum-forming substances, oil, catalyst poisons, impurities, and other objectionable substances. Objectionable substances are those which may be injurious to the system or which may interfere with its transmission through the system. Product will not contain liquid contaminants such as glycol, inhibitors, amine, or any compound added to the product to enhance the ability to meet these specifications. Particulate content shall be less than 20 micron in size. A partial list of potential contaminants includes Oxygen, Oxygenates, Nitrogen, Halides, Arsine/Arsenic, and Mercury.

1. Use a corrosion cylinder rated at a minimum of 1500 psig.
2. The use of corrosion masking agents is strictly prohibited.

NOTE ON ACCOUNTING: For accounting purposes, Methane and Ethylene shall be considered Ethane and Propylene and Butane shall be considered Propane, all within the above specifications.

Specification Committee Approval:

Steve Martindale	Mike Smith	Phu Phan	Gregory Clark	Tim Moss
Quality Control	Business Management	Operations	Analytical Systems	Distribution