



**WILLIAMS MIDSTREAM NATURAL GAS LIQUIDS
SPECIFICATIONS
ETHANE- PROPANE MIX**

SPECIFICATION POINT	TEST METHOD (Note 1)	SPECIFICATIONS
Methane & Lighter (Note 2)	ASTM D-2163	Maximum 1.50 L.V.%
Ethane	ASTM D-2163	Minimum 75.00 L.V.% Maximum 82.00 L.V.%
Ethylene	ASTM D-2163	Maximum 1.50 L.V.% (Note 3)
Propane	ASTM D-2163	Minimum 15.00 L.V.% Maximum 25.00 L.V.%
Propylene	ASTM D-2163	Maximum 1.00 L.V.% (Note 3)
Butanes & Heavier	ASTM D-2163	Maximum 0.80 L.V.%
Carbon Dioxide	ASTM D-2163	Maximum 1,000 ppm _w
Corrosion	ASTM D-1838	Maximum Number 1 Copper Strip @ 100°F (Note 4)
Volatile Sulfur	ASTM D-2784, D-6667, or D-5623	Maximum 30 ppm _w
Hydrogen Sulfide	ASTM D-2420 or D-5623	Maximum 2 ppm _w (Pass)
Water Content	Inspection	No Free Water
Contaminants	Ethane-Propane Mix shall be commercially free from dirt, rust, scale, sand, dust, gums, and gum-forming substances, oil, catalyst poisons, impurities, and other objectionable substances which may be injurious to the system or which may interfere with its transmission through the system. Product will not contain contaminants such as glycol, inhibitors, amine, oxygen, oxygenates, nitrogen, halides, chlorides, arsine/arsenic, mercury, 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.	

Notes:

1. The most current version of the published industry test method will be referenced. Other appropriate industry approved test methods may be substituted if all parties are in agreement.
2. Includes Nitrogen and Oxygen
3. For accounting purposes, methane and ethylene shall be considered ethane, and propylene and butane shall be considered propane within the above specification limits
4. The use of corrosion masking agents is strictly prohibited