



## ENTERPRISE PRODUCTS OPERATING LLC

### MID-AMERICA PIPELINE COMPANY AND SEMINOLE PIPELINE FUNGIBLE REFINERY GRADE BUTANES

COMPONENT	TEST METHODS	SPECIFICATIONS
Composition: Ethane & Lighter Propane & Lighter Isobutane Butanes & Heavier Pentanes & Heavier Olefins	ASTM D-2163	0.5 Liq. Vol.% max. 3.5 Liq. Vol.% max. 12.5 Liq. Vol.% max. 96.5 Liq. Vol.% min. 50.0 Liq. Vol.% max. 2.0 Liq. Vol.% max.
Vapor Pressure @ 100 deg F	ASTM D-1267 or D-6897	50 psig max.
Fluorides	UOP-619	500 ppm wt. max.
Corrosiveness, Copper Strip	ASTM D-1838	No.1
Volatile Sulfur	ASTM D-4045	150 ppm wt. max.
Hydrogen Sulfide	ASTM D-2420	Pass
Distillation: End Point	ASTM D-86	375 °F max.
Water Content	VISUAL	No Free Water
Color, Saybolt Number	ASTM D-156	+25 min.

NOTE: The specification defines only the basic purity for this product. The product is to be free of any contamination that might render the product unsuitable for its commonly used applications. Specific contaminants include (but are not limited to): dirt, rust, scale, and all other types of solid contaminants, caustic, amines, chlorides, heavy metals, oxygenates, inerts, and any component added to the product to enhance the ability to meet the specifications.

Specification Committee

Approval:

Gene Flipse  
Quality Control

Jim Collingsworth  
Business Management

Rick Fullmer  
Operations