Method of Sale for Liquid Measuring Devices – HB 130

MOS-26.3 Section 2.20 Gasoline and Gasoline Oxygenate Blends

Prentiss Searles
January 2026

American Petroleum Institute

Density Correction of Gasoline-Ethanol Blends

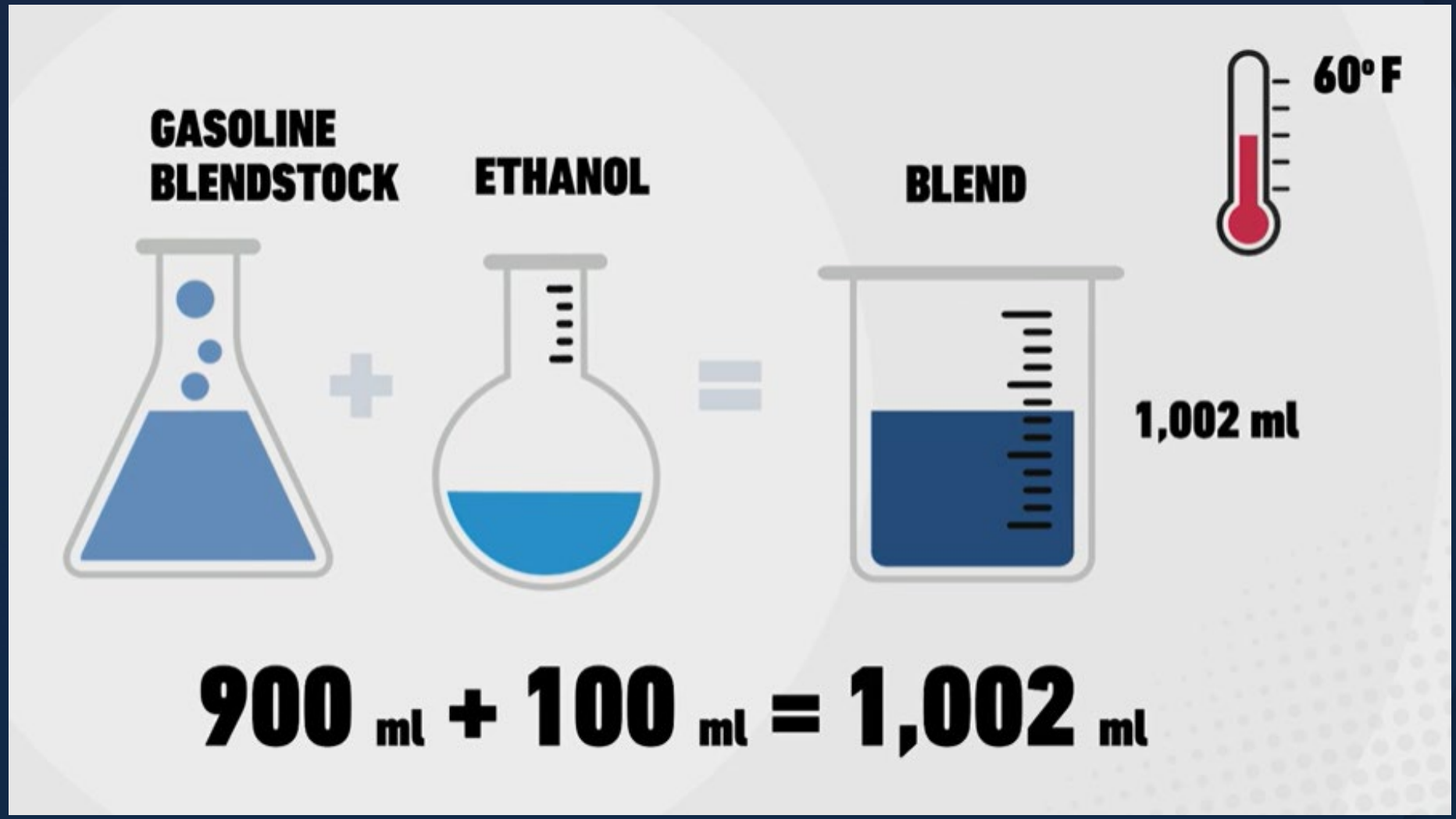
Fact: The volume of gasoline and ethanol when blended is more than the volume of the two liquids measured separately.

Some terminals measure the blended product in the custody transfer meter, while others use multiple custody transfer meters to measure the gasoline and ethanol and do not capture the volume gain.

Issue: An inequity occurs because of this difference between the terminals.

Solution: For terminals that don't measure the volume growth in the final blended product, they can apply the same industry standard that is used to calculate net temperature compensation to calculate the gain in volume due to the density change.

Gasoline & Ethanol Blending Explained



- https://cdn.api.org/videos/API-Ethanol-Blending-Long-Full-Video.mp4

Method of Sale – Gasoline and Gasoline Oxygenate Blends

HB 130 Section 2.20.2. currently requires declarations on the Product Transfer Document:

- Volume of the product being transferred
- Oxygenate or oxygenate blend and methanol
- Noting “Additional declarations may be required for specific fuels”

Proposal adds two new declarations:

- ATC and Non-ATC – 1. Net volume delivered and 2. Adjusted to 60 ^{o}F
- Automatic and non-Automatic Density-Correction – 1. Excess volume of finished product, 2. Net + Excess volume, and 3. Adjusted to 60 ^{o}F

Questions?

Prentiss Searles
American Petroleum Institute
202-682-8227
searlesp@api.org

Background

Proposed Changes to HB 130 and HB 44

- **HB 130 - MOS-26.3**
  - Section 2.20 Gasoline and Gasoline Oxygenate Blends Section
- **HB 44 – LMD-26.1**
  - S.2. Measuring Elements
  - S.4. Marking Requirements
  - N.4. Testing Procedures
  - T.5. Density Correction Systems
  - UR.3.6. Temperature Compensation and Volume Correction, Wholesale

Committee of Petroleum Measurement

- Responsible for the Manual of Petroleum Measurement Standards (MPMS)— the most widely cited standards by regulators addressing global custody transfer operations
- Over 200 standards used throughout industry
- Multiple API standards used to measure gross volume and more than 10 standards used at terminal rack for net calculation

Subcommittees include:

- Measurement Education and Training
- Evaporation Loss Estimation
- Production Measurement Allocation
- Measurement Accountability
- Measurement Quality
- Gas Fluid Measurement
- Liquid Measurement

API standards used in terminal measurement systems:

Established trade and customs to measure finished gasoline

- Ch. 8.1 Manual Sampling of Petroleum Products
- Ch. 5.x Metering
- Ch. 6.x – Metering Systems
- Ch. 4.x Proving Systems
- Ch. 7.4 Dynamic Temperature Measurement
- Ch. 11 Physical Properties Data
  - Chapter 11.1 - Temperature and Pressure Volume Correction Factors for Generalized Crude Oils, Refined Products, and Lubricating Oils
  - Ch. 11.3.3 Miscellaneous Hydrocarbon Product Properties—Denatured Ethanol Density and Volume Correction Factor
  - Ch. 11.3.4 Miscellaneous Hydrocarbon Properties - Denatured Ethanol and Gasoline Component
  - Ch. 11.4.1 Density of Water and Water Volumetric Correction Factors for Water Calibration of Volumetric Provers
- Ch. 12.2 Calculation of Petroleum Quantities using Dynamic Measurements
- Ch. 21.2 Electronic Liquid Measurement

Density Correction

- 9 meetings held about every two weeks from March – Aug
- Developed final wording and submitted Form 15 to NCWM on August 15 deadline
- Regional Meetings
- Interim Meeting in January
- Goal to vote at NCWM Annual meeting in 2026

Density Correction Work Group

- 5 States represented – IL, OR, TX, KS, MO
- 2 NIST staff
- 2 Retailer reps
- 5 Meter manufacturers
- 12 Terminal operator companies
- 3 Consultants