

ETHANOL BLENDING

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10 COMMONLY ASKED QUESTIONS

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10 COMMONLY ASKED QUESTIONS

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WHERE CAN I GET LABELS FOR ETHANOL BLENDS?

- **I AM UNAWARE OF ANY ONLINE SOURCES THAT ARE SELLING OR MAKING LEGALLY DESCRIBED ETHANOL BLEND LABELS. WE HAVE REACHED OUT TO LOCAL SIGN SHOPS AND HAD EVERY DISPENSER CUSTOM CUT USING PVC VINYL WITH A UV PROTECTED LAYER VERY SIMILAR TO FACTORY DECALS.**

CAN I CHECK ETHANOL CONTENT QUICKLY IN THE FIELD?

- **YES!**

YOU JUST NEED A FEW SIMPLE THINGS.

- **1 – GRADUATED CYLINDER**
- **2 – WATER**
- **3 – FUEL**

CAN I USE ANY FUEL DISPENSER FOR ETHANOL BLENDING?

NO! Neither of the two largest manufactures in the US, Gilbarco Veeder-Root nor Wayne Fueling systems a Dover company had E-85 compatible blenders available until late 2007 early 2008.

Currently Gilbarco is producing the Encore S product line that is available in an E-85 compatible model.

Wayne is currently producing the Ovation 2 series as an available E-85 compatible model.

Average cost to add blending & E-85 compatibility to a dispenser from either manufacture is between \$8,500-\$11,000 to comply with current UL listing requirements.

CAN E-85 BE USED AS A BLEND STOCK?

WHILE THERE ARE NO FEDERAL REGULATIONS AGAINST USING E-85 AS A BLEND STOCK IT IS **HIGHLY DISCOURAGED. THE REASONING BEHIND THIS DISCOURAGEMENT IS E-85 COMING FROM THE REFINERS CAN BE EVER CHANGING IN ETHANOL CONTENT BASED ON VAPOR PRESSURE REQUIREMENTS. ONE LOAD MAY BE 83% ETHANOL AND THE NEXT WEEK IT MAY BE 70% ETHANOL. NOW YOUR STUCK TRYING TO CALCULATE WHAT THE ACTUAL ETHANOL CONTENT OF YOUR BLEND STOCK IS TO ADJUST YOUR BLEND RATIOS TO KEEP THEM WITHIN THE MINIMUM RANGE.**

WHAT DIFFERENCE DOES PURITY OF ETHANOL MAKE IN BLENDING?

ETHANOL USED AS A BLENDING STOCK REALLY NEED TO STAY CONSISTENT. IF STARTING WITH E-98 AND CONVERT TO AN E-94 FOR INSTANCE THERE IS A 3-6% IMPACT ON BLEND RATIOS. IF E-10 IS BEING USED AS A BLEND STOCK ITS ETHANOL CONTENT VARIES THROUGHOUT THE YEAR ANYWHERE FROM 6-9%, THUS THE POTENTIAL TO HAVE A 9-14% IMPACT ON BLEND RATIOS IS THERE WITH A CHANGE IN PURITY. ORDERING THE SAME ETHANOL PRODUCT EACH AND EVERY TIME ALONG WITH BLENDING A NON-ETHANOL UNLEADED FUEL FOR IS A RECOMMENDED PRACTICE TO KEEP BLEND RATIOS AS ACCURATE AS POSSIBLE THROUGHOUT THE YEAR.

HOW MANY TIMES A YEAR DO THE BLEND RATIOS NEED ADJUSTED FOR VAPOR PRESSURE?

HANDBOOK 130 STATES – FOR BLENDS CONTAINING ONE OR MORE VOLUME PERCENT ETHANOL FOR VOLATILITY CLASSES A, B, C, D FROM SEPTEMBER 16 THROUGH MAY 31. VARIOUS STATES HAVE VARIOUS REQUIREMENTS FOR BLEND RATIO ADJUSTMENTS BASED ON TIME OF YEAR AND TEMPERATURE.

HOW DO I KNOW WHAT THE BLEND RATIOS ARE SET AT ON THE DISPENSER?

WAYNE DISPENSERS MUST HAVE WAYNE REMOTE. PRESS ENTER AND THEN CLEAR TWICE (2). IF NO OTHER BUTTONS ARE PRESSED FOR 20 SECONDS THE DISPENSER WILL STEP THROUGH THE VALUES WITH NO FURTHER INTERACTION REQUIRED. THE SALES DISPLAY WITH SHOW BLEND RATIOS AND THE CURRENT BLEND RATIOS FOR ALL BLENDED PRODUCTS.

GILBARCO ENCORE 500 AND ABOVE SERIES. MUST HAVE MANAGERS KEYPAD. PRESS ENTER THE PPU DISPLAYS WILL DISPLAY THE BLEND RATIOS PROGRAMMED. PRESS CLEAR TO EXIT.

WHAT IS THE % VARIANCE OF AN ETHANOL BLEND BEFORE THE DISPENSER NEEDS REJECTED?

BOTH 16 CFR 306 & HANDBOOK 130 ALLOW FOR A +/- 5% VARIANCE ON THE ETHANOL CONTENT FROM LABELING.

IS THERE AN ISSUE WITH SWITCHING FROM UNLEADED WITHOUT ETHANOL TO UNLEADED WITH 10% ETHANOL AS A STOCK FOR BLENDING?

SWITCHING BACK AND FORTH BETWEEN A NON-ETHANOL UNLEADED FUEL AND A 10% ETHANOL FUEL IS NOT RECOMMENDED. IF THE SITE CURRENTLY IS BLENDING A NON-ETHANOL UNLEADED FUEL AND SWITCHES TO A 10% ETHANOL UNLEADED THE SITE MAY CONSIDER ADJUSTING BLEND RATIOS. E-10 IS AS A BLEND STOCK VARIES IN ETHANOL CONTENT THROUGHOUT THE YEAR ANYWHERE FROM 5-9%.

IS THERE AN EVENT LOGGER ON THE DISPENSER TO SHOW ACTIVITY AND ADJUSTMENTS?

WAYNE WILL REQUIRE A WAYNE REMOTE. PRESS ENTER THAN CLEAR TWICE (2). PRESS NEXT TO VIEW THE BLEND RATIO CHANGE COUNTER. CONTINUING TO PRESS NEXT WILL TOGGLE THROUGH EACH BLEND RATIO CHANGE COUNTER UNTIL YOU HIT IT DISPLAYS THE VIEW VOLUME METERING UNIT CHANGE COUNTERS. TO EXIT PRESS CLEAR AND THAN ENTER THREE (3) TIMES TO EXIT WEIGHTS AND MEASURES AUDIT MODE.

IS THERE AN EVENT LOGGER ON THE DISPENSER TO SHOW ACTIVITY AND ADJUSTMENTS?

GILBARCO ENCORE SERIES REQUIRES A MANGERS KEYPAD. PRESS ENTER ONE TIME THE MONEY DISPLAY WILL DISPLAY A "P" IN THE LEFT OF THE MONEY DISPLAY TO THE RIGHT OF THE DISPLAY IT WILL SHOW THE NUMBER OF TIMES THE BLEND RATIOS HAVE BEEN CHANGED. IN THE GALLONS DISPLAY TO THE RIGHT IT WILL SHOW THE NUMBER OF TIMES THE CONFIGURATION HAS BEEN CHANGED. THE PPU DISPLAYS WILL SHOW THE CURRENT BLEND RATIOS. PRESS ENTER A SECOND TIME AND THE PPU DISPLAYS WILL SHOW THE NUMBER OF DAYS SINCE EACH METER WAS CALIBRATED. PRESS THE ENTER KEY A THIRD TIME THE PPU DISPLAYS WILL SHOW YOU THE NUMBER OF CALIBRATIONS PER METER. PRESS THE ENTER KEY A FOURTH TIME THE PPU DISPLAYS WILL SHOW YOU THE NUMBER OF PULSES PER GALLON.