

## Quick Steps for Completing Form EIA-819 and Form EIA-809

Form EIA-819 *Monthly Biofuels, Fuel Oxygenates, Isooctane and Isooctene Report* and Form EIA-809 *Weekly Oxygenate Report*

We prepared the following “quick steps” in response to certain frequently asked questions from operators of fuel alcohol producing plants reporting on Form EIA-819 and Form EIA-809. Please see materials available on the EIA website for additional information about the surveys.

<https://www.eia.gov/survey/#eia-819>

<https://www.eia.gov/survey/#eia-809>

### What are the steps to complete Part 4 of Form EIA-819?

**Step 1:** Enter gallons of stocks on-site at the beginning of the report month. Stocks on-site at the beginning of the month equal stocks on-site at the end of the prior month. Stocks on-site include gallons in tanks as well as gallons held in rail cars, trucks, barges, and tankers located at the plant.

**Step 2:** Enter gallons received at the plant during the month.

**Step 3:** Enter gallons shipped from the plant during the month.

**Step 4:** Enter gallons of plant use or loss during the month. Gallons of plant use and loss are likely to be zero at many plants.

**Step 5:** Enter gallons of stocks on-site at midnight on the last day of the report month. Stocks on-site include gallons in tanks and underground storage as well as gallons held in rail cars, trucks, barges, and tankers located at the plant.

**Step 6:** After completing steps 1-5 above, find non-zero auto-calculated line balance quantities on product lines 190, 198, 220, 170, 171, 172, 173, 149, 118, 139, and 138.

For line balance quantities greater than zero (i.e. positive numbers), enter the line balance quantity in the column “input to denaturant and product blending”. This should make the line balance quantity equal zero.

For line balance quantities less than zero (i.e. negative numbers), enter the quantity as a positive number in the column “production from denaturant and product blending”. This should make the line balance quantity equal zero.

Verify completion of step 6 by assuring all of the auto-calculated line balance quantities equal zero for product lines 190, 198, 220, 170, 171, 172, 173, 149, 118, 139, and 138. Also verify there are no gallon entries under the columns “Production from renewable feedstocks” and “Input to denaturant and product blending” on any of the product lines 195, 221, 197, 219, and 238.



**Step 6:** After completing steps 1-5, find non-zero auto-calculated line balance quantities on product lines 190, 198, 220, 170, 171, 172, 173, 149, 118, 139, and 138.

For line balance quantities greater than zero (i.e. positive numbers), enter the line balance quantity in the column “input to denaturant and product blending”. This should make the line balance quantity equal zero.

For line balance quantities less than zero (i.e. negative numbers), enter the quantity as a positive number in the column “production from denaturant and product blending”. This should make the line balance quantity equal zero.

Example Form EIA-819 part 4 with step 6 completed:

PART 4. FUEL ALCOHOL, DENATURANT, AND GASOLINE PRODUCTION, BLENDING, RECEIPTS, SHIPMENTS, PLANT USE AND LOSS, AND STOCKS (gallons)											
Product descriptions	Product code	Stocks beginning of month (equal to stocks on-site at end of prior month)	Cumulative gallons during the report month						Stocks on-site end of current report month	Line balance item (auto-calculated, equals zero when row is balanced)	Stocks in transit by water, rail, and trucks to the fuel ethanol plant at the end of the current report month
			Receipts	Production from renewable feedstocks (also report feedstocks in part 9)	Input to denaturant and product blending	Production from denaturant and product blending	Shipments	Plant use and loss (include vehicle fuel use)			
			+	+	-	+	-	-			
<b>Fuel alcohol (excluding denaturants where applicable)</b>											
Conventional fuel ethanol	195	68,600						420,000	72,400	(423,800)	
Advanced fuel ethanol	221									-	
Cellulosic fuel ethanol	197									-	
Biobutanol	219									-	
Other fuel alcohol	238									-	
<b>Denatured fuel alcohol</b>											
Denatured fuel ethanol	190	155,900				236,000		204,300	187,600	-	
Other denatured fuel alcohol	198									-	
<b>Natural gasoline and Motor fuel</b>											
Natural gasoline	220	6,700	9,000		6,900				8,800	-	
Gasoline not blended with ethanol (E0)	170									-	
Gasoline blended with ethanol (>E0-E10)	171									-	
Gasoline blended with ethanol (>E10-E15)	172									-	
Gasoline blended with ethanol (>E15-E50)	173									-	
Flex fuel (E85) blended with greater than 50% ethanol	149						44,700	44,300	400	-	
Reformulated Blendstock for Oxygenate Blending (RBOB)	118									-	
Conventional Blendstock for Oxygenate Blending (CBOB) and Sub-Octane Gasoline	139	1,800	9,400		9,100				2,100	-	
<b>Motor Gasoline Blending Components</b>	138									-	
Sum of input and production (auto-calculated)	998				16,000		280,700				
Balance item to make input = production (auto-calculated)	911				264,700		-				
Total (auto-calculated)	999				280,700		280,700				

Note that all of the auto-calculated line balance quantities equal zero for product lines 190, 198, 220, 170, 171, 172, 173, 149, 118, 139, and 138. Step 7 will deal with the non-zero line balance quantity for undenatured fuel alcohol on product line 195.

**Step 7:** Find the auto-calculated quantity on line 911 (near the bottom of Form EIA-819) under the column input to denaturant and product blending. Enter the auto-calculated quantity from line 911 as input to denaturant and product blending of undenatured fuel alcohol. Allocate the total quantity to product lines 195, 221, 197, 219, and 238 according to the types of fuel alcohol produced at the plant during the report month. For this example, assume all production was conventional fuel ethanol, and report all undenatured fuel ethanol production on product line 195.

Example of step 7 part 1 – Find the auto-calculated quantity on line 911:

PART 4. FUEL ALCOHOL, DENATURANT, AND GASOLINE PRODUCTION, BLENDING, RECEIPTS, SHIPMENTS, PLANT USE AND LOSS, AND STOCKS (gallons)											
Product descriptions	Product code	Stocks beginning of month (equal to stocks on-site at end of prior month)	Cumulative gallons during the report month						Stocks on-site end of current report month	Line balance item (auto-calculated equals zero when row is balanced)	Stocks in transit by water, rail, and trucks to the fuel ethanol plant at the end of the current report month
			Receipts	Production from renewable feedstocks (also report feedstocks in part 9)	Input to denaturant and product blending	Production from denaturant and product blending	Shipments	Plant use and loss (include vehicle fuel use)			
			+	+	+	-	+	-			
<b>Fuel alcohol (excluding denaturants where applicable)</b>											
Conventional fuel ethanol	195	68,600						420,000		72,400	(423,800)
Advanced fuel ethanol	221										-
Cellulosic fuel ethanol	197										-
Biobutanol	219										-
Other fuel alcohol	238										-
<b>Denatured fuel alcohol</b>											
Denatured fuel ethanol	190	155,900					236,000	204,300		187,600	-
Other denatured fuel alcohol	198										-
<b>Natural gasoline and Motor fuel</b>											
Natural gasoline	220	6,700	9,000		6,900					8,800	-
Gasoline not blended with ethanol (E0)	170										-
Gasoline blended with ethanol (>E0-E10)	171										-
Gasoline blended with ethanol (>E10-E15)	172										-
Gasoline blended with ethanol (>E15-E50)	173										-
Flex fuel (E85) blended with greater than 50% ethanol	149						44,700	44,300	400		-
Reformulated Blendstock for Oxygenate Blending (RBOB)	118										-
Conventional Blendstock for Oxygenate Blending (CBOB) and Sub-Octane Gasoline	139	1,800	9,400		9,100					2,100	-
Motor Gasoline Blending Components	138										-
Sum of input and production (auto-calculated)	998				16,000		280,700				-
Balance item to make input = production (auto-calculated)	911				264,700		-				-
Total (auto-calculated)	999				280,700		280,700				-

Example of step 7 part 2 – Enter the auto-calculated quantity from line 911 as input to denaturant and product blending of undenatured fuel alcohol (see screen shot below). Note that line 911 quantities equal zero under input and production columns after completing step 7 parts 1 and 2. This indicates the expected outcome where total input to blending equals total production from blending.

PART 4. FUEL ALCOHOL, DENATURANT, AND GASOLINE PRODUCTION, BLENDING, RECEIPTS, SHIPMENTS, PLANT USE AND LOSS, AND STOCKS (gallons)											
Product descriptions	Product code	Stocks beginning of month (equal to stocks on-site at end of prior month)	Cumulative gallons during the report month						Stocks on-site end of current report month	Line balance item (auto-calculated equals zero when row is balanced)	Stocks in transit by water, rail, and trucks to the fuel ethanol plant at the end of the current report month
			Receipts	Production from renewable feedstocks (also report feedstocks in part 9)	Input to denaturant and product blending	Production from denaturant and product blending	Shipments	Plant use and loss (include vehicle fuel use)			
			+	+	+	-	+	-			
<b>Fuel alcohol (excluding denaturants where applicable)</b>											
Conventional fuel ethanol	195	68,600		264,700				420,000		72,400	(688,500)
Advanced fuel ethanol	221										-
Cellulosic fuel ethanol	197										-
Biobutanol	219										-
Other fuel alcohol	238										-
<b>Denatured fuel alcohol</b>											
Denatured fuel ethanol	190	155,900					236,000	204,300		187,600	-
Other denatured fuel alcohol	198										-
<b>Natural gasoline and Motor fuel</b>											
Natural gasoline	220	6,700	9,000		6,900					8,800	-
Gasoline not blended with ethanol (E0)	170										-
Gasoline blended with ethanol (>E0-E10)	171										-
Gasoline blended with ethanol (>E10-E15)	172										-
Gasoline blended with ethanol (>E15-E50)	173										-
Flex fuel (E85) blended with greater than 50% ethanol	149						44,700	44,300	400		-
Reformulated Blendstock for Oxygenate Blending (RBOB)	118										-
Conventional Blendstock for Oxygenate Blending (CBOB) and Sub-Octane Gasoline	139	1,800	9,400		9,100					2,100	-
Motor Gasoline Blending Components	138										-
Sum of input and production (auto-calculated)	998				280,700		280,700				-
Balance item to make input = production (auto-calculated)	911				-		-				-
Total (auto-calculated)	999				280,700		280,700				-

**Step 8:** Find non-zero auto-calculated line balance quantities from step 7 on product lines 195, 221, 197, 219, and 238. The line balance quantities should all be less than zero (i.e. negative numbers). Enter the non-zero line balance quantities as positive numbers on each of the product lines 195, 221, 197, 219, and 238 under the column “production from renewable feedstocks”.

Example of step 8: Enter non-zero auto-calculated line balance quantities (see step 7 part 2 above) as positive numbers on product lines 195, 221, 197, 219, and 238 allocated according to the types of fuel alcohol products produced at the plant. For this example, assume the plant produced only conventional fuel ethanol. All of the auto-calculated line balance quantities should be zero after completing step 8.

PART 4. FUEL ALCOHOL, DENATURANT, AND GASOLINE PRODUCTION, BLENDING, RECEIPTS, SHIPMENTS, PLANT USE AND LOSS, AND STOCKS (gallons)											
Product descriptions	Product code	Stocks beginning of month (equal to stocks on-site at end of prior month)	Cumulative gallons during the report month						Stocks on-site end of current report month	Line balance item (auto-calculated, equals zero when row is balanced)	Stocks in transit by water, rail, and trucks to the fuel ethanol plant at the end of the current report month
			Receipts	Production from renewable feedstocks (also report feedstocks in part 9)	Input to denaturant and product blending	Production from denaturant and product blending	Shipments	Plant use and loss (include vehicle fuel use)			
			+	+	+	-	+	-			
<b>Fuel alcohol (excluding denaturants where applicable)</b>											
Conventional fuel ethanol	195	68,600		688,500	264,700			420,000		72,400	-
Advanced fuel ethanol	221										-
Cellulosic fuel ethanol	197										-
Biobutanol	219										-
Other fuel alcohol	238										-
<b>Denatured fuel alcohol</b>											
Denatured fuel ethanol	190	155,900					236,000	204,300		187,600	-
Other denatured fuel alcohol	198										-
<b>Natural gasoline and Motor fuel</b>											
Natural gasoline	220	6,700	9,000		6,900					8,800	-
Gasoline not blended with ethanol (E0)	170										-
Gasoline blended with ethanol (>E0-E10)	171										-
Gasoline blended with ethanol (>E10-E15)	172										-
Gasoline blended with ethanol (>E15-E50)	173										-
Flex fuel (E85) blended with greater than 50% ethanol	149						44,700	44,300	400		-
Reformulated Blendstock for Oxygenate Blending (RBOB)	118										-
Conventional Blendstock for Oxygenate Blending (CBOB) and Sub-Octane Gasoline	139	1,800	9,400		9,100					2,100	-
Motor Gasoline Blending Components	138										-
Sum of input and production (auto-calculated)	998				280,700		280,700				
Balance item to make input = production (auto-calculated)	911				-		-				
Total (auto-calculated)	999				280,700		280,700				

**Step 9:** Enter gallons known to be in-transit to the plant, but not yet arrived, by water, rail, and trucks at the end of the month under the column “Stocks in transit by water, rail, and trucks to the fuel ethanol plant at the end of the current report month”.

Example of step 9: The plant operator had 9,400 gallons of natural gasoline known to be in transit by truck to the plant but not yet arrived. Completing step 9 also completes part 4 of Form EIA-819. Note that all product lines balance across (i.e., all line balance quantities equal zero), and total input to denaturant and product blending equals total production from denaturant and product blending (product line 998) with zero balance quantities on line 911.

PART 4. FUEL ALCOHOL, DENATURANT, AND GASOLINE PRODUCTION, BLENDING, RECEIPTS, SHIPMENTS, PLANT USE AND LOSS, AND STOCKS (gallons)											
Product descriptions	Product code	Stocks beginning of month (equal to stocks on-site at end of prior month)	Cumulative gallons during the report month						Stocks on-site end of current report month	Line balance item (auto-calculated, equals zero when row is balanced)	Stocks in transit by water, rail, and trucks to the fuel ethanol plant at the end of the current report month
			Receipts	Production from renewable feedstocks (also report feedstocks in part 9)	Input to denaturant and product blending	Production from denaturant and product blending	Shipments	Plant use and loss (include vehicle fuel use)			
			+	+	+	-	+	-			
<b>Fuel alcohol (excluding denaturants where applicable)</b>											
Conventional fuel ethanol	195	68,600		662,030	238,230			420,000		72,400	-
Advanced fuel ethanol	221			26,470	26,470						-
Cellulosic fuel ethanol	197										-
Biobutanol	219										-
Other fuel alcohol	238										-
<b>Denatured fuel alcohol</b>											
Denatured fuel ethanol	190	155,900					236,000	204,300		187,600	-
Other denatured fuel alcohol	198										-
<b>Natural gasoline and Motor fuel</b>											
Natural gasoline	220	6,700	9,000		6,900					8,800	9,400
Gasoline not blended with ethanol (E0)	170										-
Gasoline blended with ethanol (>E0-E10)	171										-
Gasoline blended with ethanol (>E10-E15)	172										-
Gasoline blended with ethanol (>E15-E50)	173										-
Flex fuel (E85) blended with greater than 50% ethanol	149						44,700	44,300	400		-
Reformulated Blendstock for Oxygenate Blending (RBOB)	118										-
Conventional Blendstock for Oxygenate Blending (CBOB) and Sub-Octane Gasoline	139	1,800	9,400		9,100					2,100	-
Motor Gasoline Blending Components	138										-
Sum of input and production (auto-calculated)	998				280,700		280,700				
Balance item to make input = production (auto-calculated)	911				-		-				
Total (auto-calculated)	999				280,700		280,700				

## What are the steps to complete weekly data on Form EIA-809 consistent with monthly data reported on Form EIA-819?

**Note:** Reporting units are different on Form EIA-809 *Weekly Oxygenate Report* and Form EIA-819. Report in units of thousand barrels on Form EIA-809. Please report fuel alcohol volumes in units of gallons in part 4 of Form EIA-819.

Please report using the product descriptions and steps described below.

Report quantities of undenatured and denatured fuel alcohol products that are 198-200 proof. Exclude alcohol product quantities that are less than 198 proof.

Weekly Form EIA-809 Product code 190 (denatured fuel ethanol) is equivalent to the sum of monthly Form EIA-819 Product codes 190 (denatured fuel ethanol) and 198 ("other" denatured fuel alcohol).

Weekly Form EIA-809 Product code 191 (undenatured fuel ethanol) is equivalent to the sum of monthly Form EIA-819 product codes 195, 221, 197, 219, and 238 (undenatured fuel alcohol).

**Step 1:** Report end of week (Friday at 7:00 a.m. eastern time) stocks of denatured fuel ethanol in thousand barrels on product line 190 consistent with stocks of denatured fuel ethanol reported monthly on Form EIA-819 product lines 190 and 198. Report end of week stocks equal to the sum of stocks held on-site at the plant (including stocks held in tanks on site as well as rail cars, trucks, tankers, and barges located at the plant) and stocks in transit to the plant by truck, rail, and water. Stocks of denatured fuel ethanol in transit to the plant by truck, rail, and water will equal zero for most fuel ethanol producing plants.

**Step 2:** Report end of week (Friday at 7:00 a.m. eastern time) stocks of undenatured fuel ethanol in thousand barrels consistent with stocks of undenatured fuel alcohol reported monthly on Form EIA-819. Report end of week stocks equal to the sum of stocks held on-site at the plant (including stocks held in tanks on site as well as rail cars, trucks, and vessels located at the plant) and stocks in transit to the plant by truck, rail, and water. Stocks of undenatured fuel ethanol in transit to the plant by truck, rail, and water will equal zero for most fuel ethanol producing plants.

**Step 3:** Report production during the week (seven days ending Friday at 7:00 a.m. eastern time) of denatured fuel ethanol on product line 190. Report production of denatured fuel ethanol on Form EIA-809 on a basis consistent with net production reported monthly on Form EIA-819. Net production of denatured fuel ethanol may be calculated equal to the sum of volumes of shipments and stocks on site at the end of the week minus the sum of receipts (zero for most fuel ethanol plants) and stocks on-site at the beginning of the week.

**Step 4:** Report production during the week (seven days ending Friday at 7:00 a.m. eastern time) of undenatured fuel ethanol on product line 191 equal to the quantity of undenatured fuel ethanol produced as a finished product intended for shipment as undenatured fuel ethanol. Report production of undenatured fuel ethanol equal to the quantity of undenatured fuel ethanol shipped from the plant when it is otherwise impossible or impractical for the plant operator to know the quantity of undenatured fuel ethanol produced as a finished product for shipment.