



RAI GASOLINE BLEND OPTIMIZER

Blend Recipe Optimizer for Refiners & Traders

RAI Blend Optimizer instantly makes money for Blenders, Refiners, and Traders:

- Maximizes blend profit using prices
- Meets all specs simultaneously
- Non-linear calculations reduce octane and RVP giveaway
- Respects inventory constraints
- Blends up to 20 blend components
- Selects/Compares "best" component to buy/use

Built-in calculators for:

- EPA Complex Model RBOB VOC reduction
- Ethanol Blends: Octane & RVP Boost

Built-in Libraries for:

- Colonial PL specs
- Domestic specs
- Export specs: EU, Asia Pacific, Latin America

Built-In User Manual and Guide

The software was designed by RAI team led by Modeling Expert Lee Eliseo Curcio, to be easy to use by first-time users, which can be up and running in 15 minutes or less, and productive using all of its features in a couple of hours.

BLEND OPTIMIZER BENEFITS

- Maximizes Blend Profit
- Non-linear property calculations to minimize giveaway
- Extremely easy-to-use. You need only to decide the blend components, inventory and their prices.
- The most important specs and blendstocks are already in built-in Libraries, you can modify them or add new ones
- Has built-in the EPA Phase 2 model and Ethanol boost calculators
- Saves your time with pre-built "blend case" libraries for both US and metric units countries that can be "cloned" to suit your needs.

Optimize L		Optimize NL		BATCH SIZE, bbls		69,318		Feasible (Specs)		YES		Save		Case		EU95	
COMPONENT	RECIPE		INVENTORY (bbls)			PRICE \$/BBL	SPEC		EU95		Optimum Recipes		Status				
	VOL%	BBLs	INITIAL	FINAL	REMAINING		Minimum	Maximum	Linear	Non Linear							
MX	14.43	10000.00	0.00	10,000.00	0.00	37.40	RON	95.00		100.00	102.60	OK					
LVN	0.00	0.00	0.00	10,000.00	10,000.00	91.40	MON	85.00		88.27	87.99	OK					
FRN	0.00	0.00	0.00	10,000.00	10,000.00	84.40	AKI			34.94	95.29	OK					
Reformat	14.43	10000.00	0.00	10,000.00	0.00	81.70	RVP	6.50	8.80	7.85	8.80	OK					
FCC Gas	14.43	10000.00	0.00	10,000.00	0.00	75.40	T-10	130.00	143.00	179.60	143.00	OK					
n-C4	1.06	736.87	0.00	10,000.00	9,263.13	81.80	T-90	180.00	222.00	197.98	197.80	OK					
Alkylate	14.43	10000.00	0.00	10,000.00	0.00	75.40	T-90	200.00	287.00	245.17	278.87	OK					
HN	0.00	0.00	0.00	10,000.00	10,000.00	91.40	FBP		361.00	288.65	355.45	OK					
Eurobob nonoxy	0.00	0.00	0.00	10,000.00	10,000.00	97.60	E-200			0.00	0.00	OK					
Eurobob Oxy	0.00	0.00	0.00	10,000.00	10,000.00	90.00	E-300			0.00	0.00	OK					
TX	14.43	10000.00	0.00	10,000.00	0.00	80.00	DIINDEX		1,106.00	0.00	1084.77	OK					
Off_spec EU95	0.00	0.00	0.00	10,000.00	10,000.00	87.00	TVIL	105.80		0.00	140.75	OK					
MTBE	14.43	10000.00	0.00	10,000.00	0.00	77.00	API GRAVITY			0.00	0.00	OK					
ETOH	12.38	8581.55	0.00	10,000.00	1,418.45	78.00	SP Gravity	0.72	0.77	0.75	0.75	OK					
Reformat	0.00	0.00	0.00	10,000.00	10,000.00	82.00	SULFUR		10.00	8.42	8.42	OK					
							OXYGENATE	0.00	15.00	26.07	26.07	OK					
							OXYGEN	3.00	3.70	6.03	6.83	OK					
							BENZENE		1.00	0.14	0.14	OK					
							AROM		35.00	30.07	30.07	OK					
							OLEFINS		18.00	6.05	6.05	OK					
							VOC			-23.91	-23.15	OK					

TOTAL %		MIN		MAX	
100.00	69,318.42	10.00	700,000.00	80661.58	

OBJECTIVE FUNCTION		OPTIMIZER	
SOLUTION STATUS	685473.58	Codes	
NUM OF VIOLATIONS	0		
NUM OF SOLVER VARIABLES	1		
	15		

ECONOMICS	
COST, \$	\$72.11
SALES PRICE, \$	\$82.00
PROFIT, \$/BBL	\$9.89
TOTAL PROFIT, \$	\$685,473.58
Benzene Credits (\$/mil)	0.00
Sulfur Credits (\$/mil)	0.00

THE NEW RAI GASOLINE BLEND OPTIMIZER IS DESIGNED TO SATISFY ALL YOUR NEEDS AND TO INCREASE THE PROFITABILITY BY MAKING BETTER CHOICES

Who can benefit of the Smart Blend Optimizer?

The software is designed for people working in the Oil & Gas business, like refiners, traders, brokers, independent terminal operators, fuel buyers, customers, etc...

The RAI Blend Optimizer, while deceptively to use, is a powerful economic tool which allows to understand quickly the profitability of a blend, selection of the right components to make gasoline, to meet specs, reduce the blend properties giveaway, verify EPA compliance, Ethanol Boost.

After the user enters their own components, inventory and prices, the optimization is instantly done by clicking the "optimize" button.

The Optimum results window shows the user if the optimization is feasible or not, the optimum recipe, the optimum batch, blend predicted properties, and blend profit.

The tool is powerful because the user can play back (backcast) and change a variable, e.g. the inventory of one or more components to generate more blends recipe and compare the profit for various cases.

If the optimization is infeasible, the user can read the blend properties and understand which property is not met, to assist the user to change components, inventory, etc. to meet the spec.

To purchase or more info, please contact:

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DON'T PROCRASTINATE AND TRY THE BRAND NEW RAI GASOLINE BLEND OPTIMIZER. WE BLEND YOUR DREAMS \$\$\$