

Fuel Price in NJ, USA

www.gasbuddy.com

10-Mar-2024

Valero

Green Brook NJ 08812

() in AKI Octane

| Octane expressed in AKI (cash price) USD per US Gallon | Regular Gas (87) | Midgrade (89) | Premium (91-93) | Diesel Fuel |
|---|------------------|---------------|-----------------|---------------|
| US Excise Tax | 0.1840 | 0.1840 | 0.1840 | 0.2440 |
| NJ State Tax | 0.5075 | 0.5075 | 0.5075 | 0.5775 |
| Latest NJ Tax hike was Oct. 1st 2020 | | | | |
| Total Tax | 0.6915 | 0.6915 | 0.6915 | 0.8215 |
| Tax in % of total price | 22.82% | 18.54% | 17.60% | 21.45% |
| What remains per USD Gallon after Tax: | 2.3385 | 3.0385 | 3.2385 | 3.0085 |

For calculation purpose only how much would this be in: CHF per Liter

| | USD/CHF | | 0.8775 | |
|--|------------------|---------------|-----------------|------------------|
| | 1 US Gallon | 3.7854 | Liter | () in RON Octane |
| AKI Octane expressed in RON CHF per Liter | Regular Gas (92) | Midgrade (94) | Premium (97-98) | Diesel Fuel |
| US Excise Tax | 0.0427 | 0.0427 | 0.0427 | 0.0566 |
| NJ State Tax | 0.1176 | 0.1176 | 0.1176 | 0.1339 |
| Total Tax | 0.1603 | 0.1603 | 0.1603 | 0.1904 |
| Tax in % of total price | 22.82% | 18.54% | 17.60% | 21.45% |
| What remains per Liter after Tax: | 0.5421 | 0.7044 | 0.7507 | 0.6974 |

Gas at the pump in Switzerland costs more then double of that in NJ, as even higher taxes make up for the difference!

| | Midgrade | Premium | Diesel Fuel |
|---|-----------------|-----------------|-----------------|
| NJ, USA (cash price) USD per US Gallon | USD 3.73 | USD 3.93 | USD 3.83 |
| Swiss (cash price) USD per US Gallon | USD 7.94 | USD 8.37 | USD 8.58 |
| Swiss (cash price) CHF per Liter | CHF 1.84 | CHF 1.94 | CHF 1.99 |

Regular Gas in Switzerland has 95 RON, Premium at least 98 RON, so the Regular Gas is about equal to the US Midgrade.

Octane

North-America publishes the octane on the pump in so called **AKI** octane.
Europe and a lot of the rest of the world publish the octane in **RON** octane.

We know three octane measurements:

RON = Research Octane Number
MON = Motor Octane Number (8 to 12 Octane lower then RON)
AKI = Anti Knock Index

Refer to this short video: <https://www.youtube.com/watch?v=zf-OYXlhJis>

AKI = (RON + MON) / 2

Easy way of calculating of AKI:

Assume MON on average 10 Octane lower then RON, then **AKI on average 5 Octane lower then RON.**

www.sth-consulting.com/opinion.htm