

Street Fuels in Solo

Street and Street Touring Category

Rules Summary

- The 2017 rule provided no limits on base gasoline/approved additive constituents, or additives contained in gasoline beyond federally approved. Additionally, the 2017 rule disallowed “racing type fuels” without defining those fuels by constituents, additives, or properties.
- Under the 2017 rules, fuel was practically unenforceable for members questioning a competitor's fuel compliance.
- 2018 rule was proposed in order to establish a verifiable fuel parameter that meets Solo Values for Street and Street Touring.

Values in Solo

- Street and Street Touring competitors should feel confident we compete on 93 Octane Pump gas and not on esoteric race fuels
- Street and Street Touring competitors should have a rule that allows competitors to obtain a definitive answer if they suspect a compliance violation
- Establishing a rule that incentivizes using pumps marked 87-93 Octane available from retailers has value to our members by keeping fuel acquisition costs down.
- Off the Shelf (OTS) tunes for 93 Octane in Street Touring reduces member costs with respect to ECU tuning.
- Promotes keeping vehicles in Street Touring at a preparation level that doesn't compromise them from being usable on public streets.

The 2018 Octane Limit Goals

- **Deemphasize chasing small horsepower gains in Street Touring**
- **Octane limits embrace OTS (Off the Shelf) Street Touring Tunes targeting 93 Octane vs. Custom Tunes for 100+ Octane**
- **Keeps the regional feeder system competitor's preparation level closer the highly invested National competitor.**
- **Reduction in fuel costs**

The 2018 Octane Limit Negative Member Feedback

1. **The western states have limited 93 Octane availability (91 is more common)**
2. **Publicly available information from Ohio and Arizona state fuel quality programs show results for pump specified Octane (93 & 91) beyond the margin of +0.9 octane**
3. **Uncertainty of the Octane rating when purchasing fuel**

4. The current limit of 93.9 does not detail to the membership how margin of error works in measuring Octane.
5. Perception of transporting Fuel to events
6. Mixing Fuel to attain the desired Octane rating
7. Testing Fuel
8. Acquiring Fuel samples
9. Put limitations on the “open ecu boost” rule change

SEB Response

The SEB has continued to review fuel quality testing information, member comments, and dialog with the SCCA Board of Directors (BOD). The following rule change was submitted by the SEB and has been approved by the BOD. Effective immediately:

3.6 Fuel

A. Street and Street Touring® category vehicles will use fuel which is “Federally approved for use on public highways,” and is widely distributed and typically sold in filling stations, commonly called “pump fuel” with typical octane ratings or AKI (Anti Knock Index) $(R+M)/2$ displayed on the pump between 87 and 93. The maximum octane rating allowed is what is typically delivered from a pump marked 93 Octane*.

~~which does not exceed an octane rating of 93 AKI (Anti-Knock Index = $[R+M]/2$) with an allowed variance up to +0.9. Fuel may not exceed 15% ethanol (E15). This includes the pump fuel known as E85, but does not allow racing type fuels which are available at service station pumps.~~ Fuels comprised of more than 15% ethanol may only be used when specified by the manufacturer (e.g., in the owner’s manual for flex-fuel vehicles).

* Octane Verification - Octane levels will vary from the number listed on the pump. Octane testing has a “margin of error” and different testing procedures will produce similar but different results. For the purposes of testing gasoline, a result that exceeds 95.9 Octane is not allowed and will result in a disqualification with no exceptions (hard limit). This limit gives competitors a 99.99+% confidence level that fuel purchased from a pump marked 93 Octane is compliant.

Warning: Competitors attempting to approach the 95.9 Octane limit through mixing or by other means may inadvertently create fuel that appears compliant but may test above 95.9 hard limit.

ProSolo Finale & Solo National Championships

The SCCA is investigating an arrangement to test fueling stations in Lincoln NE. The results will be posted at the Solo National Championships for member benefit.