

Fellow R/C boaters,

We have found that high-octane gasoline causes the Fuji-Imvac 28 marine engine to run erratically. Depending on the amount of octane in the fuel, the engine may also be hard to start or may not run at all. [Note: In some countries, gasolines have a 5-point higher average octane rating than in the U.S.]

While researching the problem, we learned from experiences shared on Jim's R/C Boat Dock (<http://www.jrcbd.com>) and International Waters (<http://www.intlwaters.com>) — two credible, respected R/C boating discussion groups — that high-octane gasoline is not recommended for *any* light 2-stroke engine, due to its slower burn rate.

However, according to modelers on these sites, Coleman Fuel (camp fuel) does work quite well in such engines. It has an octane rating reportedly no higher than 70.

Most light 2-stroke engines used in R/C boating perform best with 8 oz. of high-quality, 2-cycle oil mixed to one gallon of gasoline (16:1). The same seems to be true when using camp fuel.

AquaCraft Testing:

We tested 16:1 camp fuel in our Fuji-Imvac 28-powered Rio 51. Tuning proved very easy, and boat speeds averaged around 35 mph. For comparison purposes, we also ran the boat on 85 octane, 22:1 gasoline. It performed well, but was more difficult to “needle” and averaged about 1 to 1.5 mph slower.

Another interesting note: Our tests showed that camp fuel controls the engine temperature much better than gasoline.

Conclusion:

It's fair to say that camp fuel mixed 16:1 is a good alternative to low-octane gasoline of nearly the same ratio. It tunes well and holds engine temperature lower than a comparable gasoline mix.

So, as a gasoline substitute for the Fuji-Imvac 28 marine, we recommend Coleman “camp fuel” mixed 16:1 with a good-quality 2-stroke oil.