



Hobby & Engineering Supplies Pty Ltd

**Hobby Supplies  
Engineering Supplies**

ABN 54 125 001 541



**Nitro Fuel  
Basics**

**3239 Old Cleveland Road Capalaba West Queensland 4157**

**Phone: 07 3245 7977**

**Fax 07 3245 1017**

## **NITRO CAR FUEL BASICS**

The three main components of nitro fuel are oil, methanol and nitromethane. The oil lubricates the inner workings of your engine and helps to prevent damage. The methanol is combustible fuel and the nitromethane could be likened to an accelerator that allows the fuel to burn more efficiently.

### **What Percentage Nitro to Use**

Each model of Nitro engines is designed to use a nitro percentage within a specified range. This percentage range will be specified in the manual that came with the engine. Once the engine has been broken in, it is recommended to stay within the range specified.

When breaking in a new engine, it is best to start with a lower percentage of nitro than the optimum range specified. Using a lower percentage will not provide very good performance, but your engine will be running at a lower temperature in the critical early stages of it's life.

If you are unsure of the nitro content to use and you can't find any recommendations, start low at around 10-16%. Using too high a nitro content will damage your engine quickly.

### **The Effects of Oil**

The oil in your nitro fuel is to help protect and lubricate the internal parts of the engine. Nitro car engines run quite hot so it is best to use a fuel with a good castor oil content. Castor oil tends to offer better lubrication than synthetic oil at higher temperatures. The type and amount of oil in your fuel is the only real difference (other than nitro content) between various brands.

### **Comparing Brands**

It's very difficult to determine how much better one brand performs when compared to another because every time you run the engine the conditions are different. You may get a good run from one fuel and then a better run from the next, but the better performing fuel may have actual been due to the engine having already been run or a slight change in temperature, or a little bit of contamination that's now no longer in the tank. Unless you are competing at a high level the best bet is to find a fuel that works well and stick to it.



**INFORMATION SHEET**  
[www.hobbyparts.com.au](http://www.hobbyparts.com.au)