

Nitro Resources

- [YouTube Video](#)
- [Torco Race Fuel – Nitro Methane](#)
- [Torco RC Nitro 100 – 1 Gal \\$97.98](#)
- [Torco RC Methanol – 1 Gal \\$38.00](#)
- [VP Racing Fuels Nitro 50/50 Methanol – 5 Gal \\$187.00](#)
- [VP Racing Fuels M1 Methanol – 5 Gal \\$61.00](#)
- [VP Racing Fuels M5 Methanol – 5 Gal \\$69.00](#)
- [Hyperfuels Nitro Collection](#)
- [Hyperfuels Nitro – 1 Qt \\$35.00](#)
- [Hyperfuels Nitro – 1 Gal \\$94.99](#)
- [Hyperfuels Methanol – 5 Gal \\$89.00](#)
- [Partzilla – Klotz 2 Stroke Racing Castor Oil – 1 Qt \\$10.49](#)
- [Amazon – 100% Pure Castor Oil – 1 Gal \\$32.00](#)
- [SIG Manufacturing – Castor Oil \\$12.91 Pint](#)
- [Amazon – Klotz Pre-Mix Castor – 1 Gal \\$49.18](#)
- [PowerPlus Synthetic Racing Oil – 12 Qts \\$150.66](#)
- [Redline Two-Cycle Alcohol Oil – 1 Qt \\$35.69](#)
- [FHS 2 Stroke Oil – 1 Qt \\$15.00](#)
- [Amazon – Klotz Super Techniplate – 1 Gal \\$52.85](#)
- [SIG – Klotz Techniplate Racing Oil – \\$24.38 Qt](#)
- [Uline Utility Jugs](#)
- [Amazon – Empty Gallon Jugs](#)

UTILITY JUGS					SOLD IN CASE QUANTITIES		
MODEL NO.	SIZE	CAP SIZE	COLOR	QTY./ CASE	PRICE PER JUG		ADD TO CART
					1 CASE	3+ CASES	
S-19295	32 oz.	28/410	Natural	24	\$1.30	\$1.10	ADD
S-13509	1/2 Gal.	38/400	Natural	12	1.95	1.60	ADD
S-10746	1 Gal.	38/400	Natural	12	2.85	2.35	ADD
S-10747			White		2.90	2.40	ADD

UTILITY JUG BULK PACKS – SAVE UP TO 45%					SOLD IN CASE QUANTITIES		
MODEL NO.	SIZE	CAP SIZE	COLOR	QTY./ CASE	PRICE PER JUG		ADD TO CART
					1 CASE	4+ CASES	
S-19295B	32 oz.	28/410	Natural	100	\$.95	\$.85	ADD
▪ S-13509B	1/2 Gal.	38/400	Natural	84	1.25	1.05	ADD
▪ S-10746B	1 Gal.	38/400	Natural	48	1.95	1.75	ADD
▪ S-10747B			White		2.00	1.80	ADD

▪ SHIPS VIA MOTOR FREIGHT

https://www.amazon.com/empty-gallon-jug/s?k=empty+gallon+jug&page=2&xpids=JxYsqXY3pupHd&qid=1761922246&ref=sr_pg_2

Crazy expensive!

Oil content			
Product	Oil %	Synthetic	Castor
Air 10%	18%	16%	2%
Air 15%	18%	16%	2%
Air 20%	18%	16%	2%
Air 25%	18%	16%	2%
Air 30%	18%	16%	2%

3.785 Liters to 1 Gal
5 Gal = 18.92 Liters

1 litre is 1000cc
 5% nitro is 50cc
 15% synthetic oil is 150cc
 5% castor is 50cc
 75% methanol is 750cc

>> Can anybody tell me what the effective difference between 2 stroke and 4
 >> stroke glow fuel? (Is it just percentage oil content?)
 >>
 >> USUALLY, that is all it is, HOWEVER, a lot of 4 stroke fuels are all
 >> synthetic oils. They say that castor oil will mess up the valves in a 4
 >> stroke. I don't know. My Saito 72 is 3 years old and has about 2
 >> gallons of 10% nitro with a synthetic/castor mix through it. I have had
 >> no problems at all.
 >>
 >>Can one type be used in the engine of other type given the same nitro
 >>content?

>
 > I've done a bit of reading about this topic. Conventional wisdom holds
 > that fuel for 4-stroke engines should be 100% synthetic oil instead of
 > Castor oil or a blend of synthetic and Castor oil. Conventional wisdom
 > says that Castor oil can cause excessive build-up in 4-stroke motors.
 >
 > This conventional wisdom flies in the face of the recommended fuel by most
 > every major 4-stroke engine manufacturer:
 >
 > Magnum recommends 20% Castor oil for break-in and 16% or more pure Castor
 > after break-in. A partial blend of Castor oil is required for warranty
 > coverage for Magnum 4-strokes.
 >
 > Thunder Tiger's recommendations aren't listed on Ace Hobby's website, but
 > Tower Hobbies' tech notes mention that 2-stroke fuel is recommended for
 > Thunder Tiger 4-stroke engines, and not 4-stroke fuel.
 >
 > O.S. doesn't require Castor oil, but it doesn't forbid it either. O.S.
 > only recommends fuel with 18% or greater lubricant content. Synthetic,

> Castor, or a synthetic/Castor blend may be used. O.S. does note that
> certain 4-cycle fuels shouldn't be used because they have less than 18%
> lubricant content.

>
> Like O.S., the folks at YS don't forbid or demand Castor oil. Synthetic,
> Castor, or blended lubricant can be used. YS recommends 20% to 24%
> lubricant content, however. Like O.S., YS recommends avoiding 4-stroke
> fuel with less than 20% lubricant content.

>
> Of all of the major 4-stroke engine manufacturers that I checked, only
> Saito specifically recommended synthetic lubricants over Castor oil.
> Saito also recommends at least 20% lubricant content, and a mix of
> synthetic-castor oil is acceptable.

>
> When actual manufacturers' recommendations are examined, in almost all
> cases the following parameters apply:

>
> 2-stroke fuel = 5% to 15% nitro content with 16% minimum lubrication,
> synthetic, castor, or blended lubricants.

>
> 4-stroke fuel = 10% to 15% nitro content with 18% to 20% minimum
> lubrication, synthetic, castor, or blended depending on manufacturer.

>
> Is there a universal fuel? Sure! A fuel with 10% to 15% nitro and 20%
> synthetic/castor blend lubrication will work with almost any 2-stroke or
> 4-stroke RC airplane engine from any manufacturer. A Saito purist may
> scoff at the idea of using blended lubrication, but even Saito says
> that 80/20 blended lubrication is just fine for their engines.

>

Making nitro fuel for RC cars is a complex and potentially hazardous process because nitro fuel contains nitromethane, methanol, and oil. Handling these chemicals requires proper safety precautions, such as working in a well-ventilated area, wearing protective gloves and goggles, and ensuring no open flames or sparks are nearby.

However, it is strongly recommended to **purchase pre-mixed nitro fuel** from a reputable manufacturer, as it is safer and the mixtures are optimized for RC engines. If you still wish to understand the process, here's a general overview:

Basic Nitro Fuel Components:

1. **Nitromethane (CH_3NO_2):** Provides additional oxygen to increase the fuel's energy output. The percentage of nitromethane varies in fuel blends, ranging from 10% to 40%, depending on the power you want.
2. **Methanol (CH_3OH):** The primary fuel component. Methanol is used because it provides more energy and burns cooler than gasoline.
3. **Synthetic or Castor Oil:** Lubricates the engine parts and prevents damage. The oil content typically ranges from 8% to 20% in fuel blends. Synthetic oils are common, but some prefer castor oil for added protection.

Sample Nitro Fuel Mixture (Example):

- 10-40% Nitromethane
- 50-80% Methanol
- 8-20% Lubricating oil (synthetic or castor)

Mixing Process:

1. **Measure Ingredients:**

- Use precise measuring equipment to ensure accuracy.
- Start with a safe ratio, such as **20% nitromethane, 70% methanol, and 10% oil**.

2. **Combine the Components:**

- In a **non-reactive container** (such as a glass or plastic bottle), carefully pour the methanol.
- Add the nitromethane slowly, stirring gently.
- Add the oil last, ensuring it mixes completely with the other two liquids.

3. **Store Safely:**

- Store the fuel in a **cool, dark place** in a **sealed, labeled container** away from direct sunlight and flames.
- Keep it away from children and pets.

Safety Precautions:

- **Work in a ventilated area** to avoid inhaling fumes.
- **Wear safety gear**, including gloves and goggles.
- Keep **fire extinguishers** nearby.
- **Do not attempt to mix or handle nitromethane carelessly**, as it is a volatile substance.

Legal and Safety Considerations:

- **Nitromethane** is regulated in some regions due to its explosive nature. Check your local regulations.
- Improperly mixed or handled fuel can **damage your RC engine** or lead to dangerous explosions.

Given the risks, it's best to buy nitro fuel from a professional supplier to ensure proper performance and safety for your RC car.