

# **WELCOME TO B5 BIOFUEL**

B5 is a blend of our flagship pure B100 net zero biofuel with fossil fuel at a ratio of 5% biofuel, 95% fossil fuel.

The most important effect of using biofuel is that it alleviates climate change by reducing emissions of carbon dioxide and equivalents (CO₂e). Using our B5 biofuel blend offers a 5% reduction in carbon footprint on a lifecycle basis.

B5 is a way for all companies to begin the transition to net zero fuels by replacing their current diesel supply, whether in vehicle fleets, maritime vessels or power generators.

Neutral Fuels biofuel reduces the amount of unburnt fuel per engine too. This has the effect of increasing fuel efficiency and further lowering emissions. It also burns cleaner than other fuels which reduces smog, soot and other tailpipe emissions

#### REDUCING ---



Twenty percent of the UAE'S carbon footprint comes from CO₂e emitted by vehicles that use fossil fuel. Switching to B5 biofuel immediately helps to reduce this transportation carbon footprint.















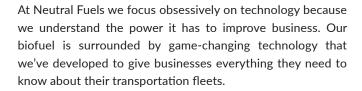




Biofuel doesn't just support corporate decision-making from the heart, but from the head too because saving costs is important to every business. Built-in benefits include:

- Reduced maintenance costs B5 can help to break down and remove carbon deposits that build up in diesel engines. Without these deposits, fuel injector valves don't get clogged up, engine performance is improved, there are fewer dirty emissions, and fuel consumption is further improved.
- Reduced replacement costs for parts and engines -B5 biofuel can help to actively prolong engine life by lubricating modern fuel injection parts which improves metal-to-metal contact, reducing wear and prolonging engine life.

#### MANAGING △↔



This includes a full audit through the supply chain to meet requirements for performance metrics and purchasing management while reducing shrinkage. It also includes an artificial intelligence engine embedded in our methodology, a cloud-based data portal, and handheld apps and IoT sensors reporting to our control room. Together, these tools provide operational and cost efficiencies that simply aren't available anywhere else.

### COMPATIBILITY $\square$



Neutral Fuels B5 is fully compatible with diesel engines manufactured worldwide. There is no need for any engine modification. Switching from petro diesel will only improve engine performance and fuel economy.

## QUALITY 🕮

Neutral Fuels is already a proven supplier of biofuel to some of the leading companies in the region, meeting not only their requirements to support their environmental initiatives but also supplying biofuel to the highest quality standards. Neutral Fuels products are third party tested to the newly created UAE ESMA Standard for biodiesel UAE.S 5023:2018, European Standard EN14214, American Standard ASTM D6751, and Indian standard IS15607-2016. We have been producing standards-compliant fuel locally in the GCC region since 2011.

Based on European technology and British engineering, quality has always been at the forefront of our operations to the extent that we have set an unprecedented high standard for the biofuel industry. We use state-of-the-art stainless steel refinery equipment and specialised European chemicals to keep our biofuel clean and safe, and our external auditing is meticulous.

We pay attention to provenance, using only high quality feedstock (in our case used cooking oil) to ensure the excellent quality of our fuel.

**B5 SPECIFICATION** 

# KEEPING IT LOCAL TO FURTHER REDUCE CARBON EMISSIONS

Our biofuel production is always a city level operation. We call it local/local/local: producing fuel in our local biorefinery from local waste for use by local customers.

Biofuel is commonly produced in huge factories using feedstock sourced from thousands of kilometres away and sold to customers thousands of kilometres away. Our philosophy is the opposite. Our feedstock supply and our customers are local to our biorefineries. We use only feedstock that has already served its core purpose so right from the start of the process we have a 100% net zero carbon footprint and we don't add to global deforestation.

Unless every one of us is helping to save our planet, nothing else we do will matter because Earth is the only home we have. B5 biofuel contributes to ensuring the survival of our species, one drop at a time. Join us!









info@neutralfuels.com | www.neutralfuels.com Follow us on Facebook, Instagram and LinkedIn

#### Units **Test Method Property** Limit 1 Appearance Visual Clear Colour, ASTM UAE.S GSO ISO 2049, ASTM D-1500 2.0 Maximum 3 UAE.S GSO ISO 129: 1990, ASTM D-482 0.01 Maximum Ash mass % 4 Calorific value, gross kcal/kg **ASTM D-4868** Report 5 Carbon residue - 10% MCRT mass % UAE.S GSO ISO 10370, GSO, ISO 1171, ASTM D-4530 0.20 Maximum 6 UAE.S GSO 1075/2002, ASTM D 974 Acid Number - Strong mgKOH/g Nil Maximum Acid Number - Total 0.1 Maximum UAE.S GSO ISO 4264/2008, ASTM D-976, ASTM D-4737 7 Cetane Index 50 Minimum 8 Copper Strip Corrosion, 3 hrs 100° C UAE.S GSO ASTM D-130 1 Maximum Density @ 15° C Kg/Ltr ASTM D-1298, ASTM D-4052 0.820 - 0.845 9 °C UAE.S GSO ISO 3405, ASTM D-86 10 Distillation, 95% recovery at 360 Maximum 11 Flash Point, PMCC °C UAE.S GSO ISO 2719, ASTM D-93 65 Minimum 12 Pour Point °C. UAE.S GSO ISO 3016, ASTM D-97, ASTM D-5949 Report 13 Cloud Point °C. ASTM D-2500, ASTM D-5773 Report 14 **CFPP** °C ASTM D-6371, IP 309 Summer +12°C Winter +5°C 15 Sediments + Water Vol. % ASTM D-2709 0.05 Maximum 16 Sulphur, Total mg/kg UAE.S GSO ISO 20884, ASTM D-5453, 10 Maximum ASTM D-2622, ASTM D-4294 UAE.S GSO ISO 3104. ASTM D-445 17 Viscosity @ 40°C cSt. 20-45 18 Poly Aromatic Hydrocarbon (PAH) mass % IP 391 11 Maximum 19 Lubricity, HFRR ASTM D-6079, IP 450 300 Maximum microns Oxidation Stability 20 **ASTM D-2274** 25 Maximum g/m<sup>3</sup> 21 Conductivity @ 20°C Ps/m ASTM D-2624 50 Minimum

