This Fuel News provides a guideline on fuel storage in small containers from handy cans to fuel tanks of equipment. It only covers quality issues and does not address safety and legislative issues around storage. For safety and legislation refer to the latest issue of Australian Standard 1940.

For domestic use fuel should be stored in steel cans of 2.5 litres, 5.0 litres or in 25 litre jerry cans. Plastic containers of the approved type with the Australian Standards mark (AS2906-1991) on the bottom can also be used.

**PETROL AND TWO STROKE MIX – STORAGE IN CONTAINERS**

Volatile fuels such as petrol and two stroke mixes will store for up to one year in a sealed container. After that period the fuel may still be fit for purpose but problems such as hard starting and spark plug fouling may occur due to lack of light components. Once the seal is broken then lighter components evaporate and the storage life is best assumed to be 6 months at ambient temperatures of 20 deg C and 3 months at ambient temperatures of 30 degrees C or more.

**PETROL AND TWO STROKE MIX – STORAGE IN EQUIPMENT**

Petrol and two stroke mix in a fuel tank is exposed to the air and lighter components will readily evaporate. This will result in the fuel becoming heavier and will cause hard starting and spark plug fouling and rough running and misfire because the fuel will make the air fuel mix richer in fuel, not all of this fuel can be completely burnt so it will leave sooty deposits in the combustion chamber. For this reason any petrol and two stroke mix which has been in the equipment tank for more than 2 weeks at 30 deg C or higher should be used with caution. Volatile fuel that has been in equipment fuel tanks for more than two weeks should be freshened with an equal volume of new fuel to restore volatile components and reduce fouling issues.

Keeping equipment fuel tanks one third full stops moisture from getting into the fuel tank and leaves room to add fuel to freshen the mix. Safety concerns need to be addressed when keeping equipment tanks partially full while not in use.

BP fuels contain anti oxidants to stop fuel from deteriorating and forming gums, they contain metal deactivators to prevent corrosion of copper and brass fuel system components and detergents to clean fuel systems of deposits that interfere with performance.

BP Ultimate also contains a corrosion inhibitor to keep steel lines and components free of rust and the higher octane provides protection against octane loss during storage.

**DIESEL STORAGE**

Diesel is not volatile and so does not suffer from starting issues. When stored under cover in sealed containers it will last for 1 year but it can last longer. The main issue with diesel fuel in storage is formation of gums and sediments that block filters, this is associated with darkening in colour.

The main problem with diesel fuel in opened containers is that moisture from condensation will create a favorable environment for fungus and bacteria that degrade the fuel. The simple solution is regular treatment with a biocide. (Every 6 months)

For further information, please call the BP Lubricants and Fuel Technical Helpline 1300 139 700 local call
Or visit www.bp.com.au/fuelnews