



DRUMMED FUEL STORAGE & DISPOSITION GUIDELINES

Revised December 2003

Drummed fuels should be **stored under cool, dry, shaded conditions** to maintain fuel quality. If drummed fuel must be stored outside, the drums should be **stored on their sides** (preferably on racks). If this is not possible, drums should be **stored upright, with a slight tilt** (a 2 x 4 under one side of the drum is useful) so that water will drain off the top of the drum. The drum should be positioned so that a bung is not at the low point, where it could be covered by water. (Water sitting on the top of a drum can be drawn into the drum when it cools down after a warm day.) **Plastic drum covers** or tarps over the drums are also recommended.

All drummed products should be **used on the “FIFO” principle: “first in, first out”**. **Use the oldest product first.**

Fill codes on drums are in the form of YY/MM/DD, which is year / month / day.

Drums of stored fuel should be **checked regularly for leakage**, to prevent localized environmental contamination of the soil and groundwater.

Both **gasolines and diesel fuels are blended seasonally**. High volatility winter gasoline may give operating problems in summer. Lower volatility summer gasoline may cause difficult starting in winter. Summer diesel fuel may gel or wax in winter, clogging fuel filters.

The table on the reverse side of this bulletin gives an indication of the **“shelf life”** of drummed petroleum fuels and solvents. This guideline assumes that the drummed products are **STORED UNDER COOL, DRY, SHADED CONDITIONS**, and drum seals are still intact. Under poor storage conditions, where the product gets hot, wet or dirty, or drums become dented or rusty, the **useful life could be much shorter.**

Volatile products, such as automotive and aviation gasolines, have shorter storage lives than heavier products because the lighter, volatile components can evaporate over time. This changes the composition of the fuels, and makes them unsuitable for use. Automotive gasolines contain some components which can degrade to form gums, varnish or sediment over time.

Heavier products such as diesel fuel, furnace fuel, Jet A-1, and Petrosol 3139, do not have volatile components, and retain their quality for much longer time periods under good storage conditions.

If any **sediment** is present in drummed products, the **fuel should be filtered** before use or blending into bulk tankage.

Contaminated drummed product which is unsuitable for blending into bulk fuel may have to be treated as **hazardous waste**.



DRUMMED FUEL STORAGE LIFE & DISPOSITION GUIDELINES

<u>PRODUCT</u>	<u>DRUM STORAGE LIFE</u>	<u>INSPECTION & DISPOSAL INSTRUCTIONS</u> ^(1,2)
Aviation Gasoline 100 LL (AvGas 100 LL) ⁽³⁾	1 year	- inspect visually to ensure product is dry and no sediment is present. (The lead compound can degrade, forming a sediment.) AvGas 100 LL <u>contains a lead compound which presents a disposal problem.</u> Contaminated or old product should only be returned to the refinery with permission of refinery staff. - Do not blend AvGas 100 LL into automotive gasoline.
Gasoline ⁽²⁾	1 year	- inspect visually. ⁽¹⁾ - blend into bulk regular gasoline at less than 10 % by volume, for immediate use.
Jet B, Jet B-DI	2 years	- inspect visually. ⁽¹⁾ - blend into regular gasoline at less than 2 %.
Jet A, A-1	2 years	- inspect visually. - Petro-Canada Jet A-1 may be sold as kerosene or blended into stove oil or diesel fuel at less than 10 %.
Diesel Fuel ⁽²⁾	2 years	- inspect visually ⁽¹⁾ - blend into bulk diesel at less than 10 % , for immediate use.
Stove Oil, Furnace Oil	2 years	- same as diesel fuel.
Petrosol 3139	4 years	- same as diesel fuel.

Notes:

- ¹ Only outdated product that is clean and bright may be blended off.
Filtration may be necessary to remove dirt or sediment.
Dirty, wet, or contaminated product should be disposed of as slop or waste product.
- ² Gasoline and diesel fuel are blended seasonally. See first page.
- ³ Product unsuitable for disposition into bulk product may have to be treated as hazardous waste.