

Feeding your Rotec 4-Stroke Radial Engine Engine Lubrication

Oil Specifications

Rotec recommends using a high quality, major brand, 4-stroke motorcycle oil.

Oil Types

Users running leaded AVGAS more than 30% of the time should only use semi-synthetic oils, since a full-synthetic oil can sludge and create residues.

Viscosity

A multi-grade oil is recommended. Refer to figure 1 to select the appropriate viscosity for your climate.

General Recommendation:

- Shell Advance VSX4 10W-40 For cold conditions where the oil temp will be lower than 120 C
- Shell Advance VSX4 15W-50 for standard operating conditions where oil temp will be above 120 C

As a general guide ROTEC use the 15W-50 grade for all testing year round in Melbourne which falls into the Temperate zone 5-40C.

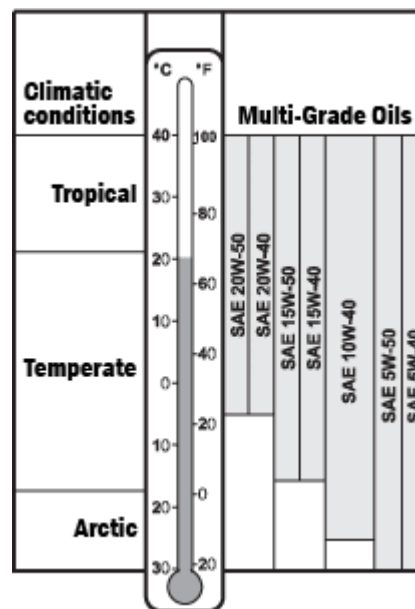


Figure 1. Selection of oil viscosity based on climatic conditions.

Rotec are aware that it may be difficult to source Shell Advance VSX4 oil in the USA so here is a list of alternate oils. Each falls into the category of being a **semi synthetic** (important that it's not fully synthetic or fully mineral), **for 4 stroke motorcycles** and is a **multi-grade oil** Furthermore, the built in gear additives are used to withstand the high stresses in the reduction gearbox. All the following listed oils fall within the specification required and are alternatives to Shell's product:

- Castrol GPS4 SAE 10W-50
- Yacco MVX Synthetic SAE 15W-50
- Valvoline Dura Blend Synthetic SAE 10W-40
- Penzoil Motorcycle Motor Oil SAE 20W-50
- Pro Honda HP4 SAE 20W-50 SJ