# PENRITE TECHNICAL BULLETIN. No. 202

### Two Stroke Oils and Mix Ratios?

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With a range of Two Stroke engine oils that are suitable for most applications, from full synthetic to castor based products, Penrite has the right product for the right application. Find below the most commonly used Two Stroke products within the Penrite range. If unsure of which product to use in your application, Click Here to visit the Penrite Recommendation Guide.

# **Small Engine GreenKeepers Two Stroke**

Suitable for air-cooled Two Stroke engines in motor mowers, brushcutters and other agricultural and industrial Two Stroke power units. Product is to be used at the engine manufacturers' recommended mix ratio.

## Industry Specifications: API TC, JASO FB.

# Small Engine Hi-Per Two Stroke

A high performance, semi-synthetic Two Stroke, low smoke oil suitable for warranty service in Two Stroke engines requiring API TC/JASO FC oils or higher. Suitable for garden equipment, chainsaws as well as Sea-Doo jet skis. Product is to be used at the engine manufacturers' recommended mix ratio.

Industry Specifications: API TC, JASO FC, ISO EG-C.

#### **MC-2ST Semi Synthetic**

A semi synthetic Two Stroke engine oil suitable for high performance machinery such as motorbikes and go karts operating under race conditions. Product is to be used at the engine manufacturers' recommended mix ratio.

Industry Specifications: API TC, JASO FD, ISO EG-C.

### **MC-2ST Full Synthetic**

Ultimate full synthetic, ester based Two Stroke oil for high performance motorbikes, go karts and in other severe Two Stroke applications. It exceeds ISO EG-D and JASO FD. It is 64% biodegradable according to OECD 301B, making it friendlier to the environment than mineral oils. Product is to be used at the engine manufacturers' recommended mix ratio. Industry Specifications: API TC, JASO FD, ISO EG-D.

#### **Race Castor**

Race Castor Oil is an ashless SAE 20W-40 engine oil manufactured from high quality castor vegetable oil, synthetic ester, anti-corrosion additives and an advanced anti-oxidant. Suitable for high performance engines such as Go Karts and model aircraft.

#### **Marine Outboard 2 Stroke Oil**

A low smoke oil suitable for use in water cooled outboard engines using both oil-injection and pre-mix fuel systems as well as the new direct injection engines. Product is to be used at the engine manufacturers' recommended mix ratio. Approved: NMMA TC-W3® Number RL-00419J.

#### **Biomarine Synthetic Outboard 2 Stroke**

A fully synthetic Two Stroke engine oil suitable for premix and direct injection fuel systems, which can also be used in large capacity outboards. Product is 67% biodegradable so it's also friendlier to the marine environment than mineral oils. Product is to be used at the engine manufacturers' recommended mix ratio.

Approved: NMMA TC-W3® Number RL-33201M.

Fuel / Oil Ratio	mls per 1 Litre of fuel	mls per 5 Litres of fuel	mls per 10 Litres of fuel	mls per 20 Litres of fuel	
5:1	200	1000	2000	4000	
10:1	100	500	1000	2000	
15:1	67	333	667	1333	_
16:1	63	313	625	1250	For Example:
20:1	50	250	500	1000	If your
25:1	40	200	400	800	brushcutter
30:1	33	167	333	667	requires a 25:1
33:1	30	152	303	606	Fuel to Oil ratio
35:1	29	143	286	571	and you have a
40:1	25	125	250	500	5 Litre fuel
45:1	22	111	222	444	container, you would add 200
50:1	20	100	200	400	mls of Two
55:1	18	91	182	364	Stroke oil to
60:1	17	83	167	333	your fuel
65:1	15	77	154	308	container prior
70:1	14	72	143	286	to re-fuelling.
75:1	13	67	133	267	
80:1	13	63	125	250	
85:1	12	60	120	240	
90:1	11	55	110	220	
95:1	11	53	105	210	
100:1	10	50	100	200	

Information is correct as of August 2012.

