



## Renewable Lubricants, Inc.

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### Bio-SynXtra™ TC+ 2-Cycle Engine Oil



### *"Biobased Lubricants that Perform Like Synthetics"*

Bio-SynXtra™ TC+ 2-Cycle Engine Oil is a patented, readily biodegradable<sup>1</sup>, biobased synthetic formula with improved additive technology that meets and exceeds API TC+ for high performance air-cooled 2 Cycle Engines. This improved additive technology provides additional antiwear/anti-scuffing protection and is recommended for used in lawn and garden equipment, chain saws, snow blowers, motor scooters, mopeds, air-cooled snowmobiles, and air-cooled marine engines. In addition, it meets and exceeds the National Marine Manufacturers Association (NMMA) requirements for obsolete Water-Cooled TC-W (BIA), TC-WII for older outboard 2-Cycle Engine.

Bio-SynXtra™ TC+ contains enhanced lubricity boosters and additional cleanliness chemistry that improves lubrication performance for high output Motorcycle API TC and Husqvarna Chain Saw 242/266 requirements. It is specifically formulated to reduce visible smoke and burn clean, minimizing deposits and carbon buildup, and preventing ring sticking and spark plug fouling. In addition, this technology minimizing deposits and carbon buildup in equipment operating at high and low RPMs.

Bio-SynXtra™ TC+ is recommended in both carbureted and Direct Fuel Injected (DFI) systems. This ashless, Low-Smoke Formula contains **Stabilized\*** Technology to improve fuel stability.

**For premixed fuel-oil systems, see owner's manual for recommended fuel: oil ratio.**

#### Typical Characteristics

Property	Typical Value	Method
Viscosity, cSt 100°C	8.8	ASTM D-445
Viscosity, cSt 40°C	48.1	ASTM D-445
Viscosity Index	164	ASTM D-2270
Flash point, °C	180	ASTM D-93
TBN (mg KOH/g)	6.0	ASTM D-2896
Pour Point, °C	-36	ASTM D-97
Cloud point, °C	-18	ASTM D-2500
Brookfield @ -25°C, cP	<7500	ASTM D-2988
Biodegradability	>80%	CEC-L-33-A-94
Sulfated Ash	<0.001	ASTM D-874
Nitrogen % wt.	0.22	ASTM D-3228M

#### Bench & Engine Tests

Compatibility	Pass	NMMA_CTCW
Filterability	Pass	NMMA_FPT
Fuel Miscibility	Pass	ASTM D-4682/#992
Rust	Pass	NMMA
Lubricity	Pass	AF-27
Yamaha CE50S Tightening/Lubricity Test	3.90 / 4.37 / Pass	Equal to or better than reference ** OS250541
Torque Drop, lb-in. Candidate/Reference/Eval.		within 90% confidence level

<sup>1</sup> Readily Biodegradable >80% within 21 days in CEC L-33-T-82 test.

\*STABILIZED by Renewable Lubricants\* is RLI's trademark on their proprietary and patented anti-oxidant, anti-wear, and cold flow technology. High Oleic Base Stock (HOBS) are agricultural vegetable oils. This Stabilized technology allows the HOBS to perform as a high performance formula in high and low temperature applications, reducing oil thickening and deposits.

Patented Product: US Patent 6,383,992, US Patent 6,534,454 with additional Pending and Foreign Patents  
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<u>Availability</u>	<u>F.O.B. :Hartville, Ohio, USA</u>	<u>Quart</u>	<u>1 Gallon</u>	<u>5 Gallon Pail</u>	<u>Drum</u>	<u>Totes</u>	<u>Bulk</u>
Product Item #		85211	85213	85214	85216	85217	85219