



Unimix® 2-Cycle Motor Oil

Phillips 66® Unimix 2-Cycle Motor Oil is a high-quality, ashless engine oil specially designed for use in water-cooled and most air-cooled 2-stroke cycle engines. It is TC-W3® certified by the National Marine Manufacturers Association (NMMA), and also meets API TC and JASO FB performance requirements for use in air-cooled 2-stroke cycle engines. It is recommended for use in low- to mid-horsepower (up to 115 HP) engines, and may be used in either direct oil injection or premix engines.

Unimix 2-Cycle Motor Oil is formulated to minimize piston ring sticking and exhaust port deposits to maintain good power output in 2-stroke cycle engines. It also protects against piston and cylinder scuffing and helps reduce spark plug fouling and pre-ignition problems. It provides rust and corrosion protection in service and during storage. It is pre-diluted with a high-flash solvent for easy mixing with gasoline at low temperatures.

Applications

- Outboard marine engines
- Personal watercraft
- Motorcycles, scooters and all-terrain vehicles (ATVs)
- Snowmobiles
- Low-output chain saws
- Lawn-care equipment (mowers, weed trimmers, leaf blowers)

Unimix 2-Cycle Motor Oil is licensed under the following industry specification:

- NMMA TC-W3® (Certification No. RL-13135T)

Unimix 2-Cycle Motor Oil meets or exceeds the requirements of:

- API Service TC
- JASO FB
- NMMA TC-WII®, TC-W® (obsolete specifications)

Features/Benefits

- Meets all outboard and personal watercraft manufacturers warranty requirements where a TC-W3® oil is specified
- Ashless dispersant/detergent formulation helps minimize engine deposits and pre-ignition
- Minimizes piston ring sticking and helps reduce exhaust port blocking
- Protects against piston and cylinder scuffing
- Good lubricity
- Reduces spark plug fouling

**Ashless Engine
Oil for 2-Stroke
Cycle Engines,
NMMA TC-W3®
Certified**

KEEPING THE
WORLD
RUNNING
SMOOTHLY. 



- Good rust and corrosion protection
- Keeps engine parts clean
- Mixes easily with gasoline at low temperatures for premix applications
- Dyed for easy visibility when mixed with gasoline
- Suitable for either direct oil injection or premix engines⁽¹⁾

⁽¹⁾ **Note:** For premix engines, always follow the manufacturer's recommendation for choosing the proper fuel-to-oil mixing ratio.

Unimix[®] 2-Cycle Motor Oil

Typical Properties	
Specific Gravity @ 60°F	0.862
Density, lbs/gal @ 60°F	7.18
Color, ASTM D1500	Blue
Flash Point (COC), °C (°F)	102 (216)
Flash Point (PMCC), °C (°F)	81 (178)
Pour Point, °C (°F)	-38 (-36)
Viscosity, Brookfield, cP @ -25°C	4,310
Viscosity, Kinematic	
cSt @ 40°C	30.9
cSt @ 100°C	5.6
Sulfated Ash, ASTM D874, wt %	<0.001

Health & Safety Information

For recommendations on safe handling and use of this product, please refer to the Safety Data Sheet via <http://www.phillips66.com/EN/products/Pages/MSDS.aspx>.