



# Quaker State

## QUAKER STATE<sup>®</sup> ULTIMATE DURABILITY MOTOR OIL

### PRODUCT DESCRIPTION

QUAKER STATE<sup>®</sup> ULTIMATE DURABILITY MOTOR OIL, is specially formulated to protect today's sophisticated engines. These small modern engines produce more horsepower, have tighter tolerances and produce more heat than ever before.

Increased heat can mean increased friction and oxidation, which could ultimately rob your engine of performance.

Contains **Heat Activated Additives** – a unique formulation specifically designed to maintain wear protection and viscosity in high revving and extreme high heat conditions, including stop and go city driving. As your engine temperature increases, a heat-activated friction modifier, and anti-wear system kick in to maintain the oil's wear protect. This advanced protective layer helps reduce metal to metal friction. Special anti-oxidants also resist oxidation and thermal breakdown of the oil. In addition, the unique viscosity modifier system resists shearing to help maintain the proper viscosity.

### APPLICATION

The unique properties of QUAKER STATE<sup>®</sup> ULTIMATE DURABILITY MOTOR OIL are especially apparent in the following applications:

- European vehicles
- Technologically advanced engines
- High performance engines
- Vehicles that are driven in very hot or cold weather



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## FEATURES

- Special formulation to resist wear and viscosity loss in severe driving conditions.
- Meets or exceeds API SN and prior Service Classifications
- Meets or exceeds the requirements of ILSAC GF-5, GF-4, GF-3 and GF-2 (SAE 0W-20, 5W-20, SAE 5W-30 and SAE 10W-30)
- Meets or exceeds the requirements for GM 6094M (SAE 5W-20, 5W-30, SAE 10W-30)
- Meets or exceeds Ford WSS M2C945-A specification (SAE 5W-20)
- Meets or exceeds Ford WSS M2C946-A (SAE 5W-30)
- Meets or exceeds the Chrysler MS 6395-S specification (SAE 5W-20, 5W-30, 10W-30)
- Meets or exceeds the requirements for approval to GM 4718M (5W-30 and 10W-30)
- Meets or exceeds the European ACEA A1 and A3 (5W-50).

## Benefits.

### ***Wear Protection.***

No synthetic motor oil provides better wear protection\*.

### ***Oxidation Control.***

High resistance to oxidation, keeping the oil fresher for longer.

### ***Oil Flow.***

Superior lubrication flow and pumpability at high and low temperature \*\*.



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## *Engine Cleanliness.*

Excellent protection against formation of sludge and other harmful deposits\*\*\*.

\*Sequence IV-A, wear test on 5W-30 engine oil.

\*\* Comparison against Quaker State Advanced Durability Motor Oil

\*\*\*Sequence IIIIG & VG tests on 5W-30 engine oil

## **HEALTH & SAFETY**

Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from your Pennzoil representative.

## **PROTECT THE ENVIRONMENT**

Take used oil to an authorized collection point. Do not discharge into drains, soil or water.



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## TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

### QUAKER STATE<sup>®</sup> ULTIMATE DURABILITY MOTOR OIL.

TEST	METHOD	TYPICAL RESULTS				
		0W-20	5W-20	5W-30	5W-50	10W-30
Viscosity Grade.		0W-20	5W-20	5W-30	5W-50	10W-30
API Service		SN	SN	SN	SN	SN
ILSAC		GF-5	GF-5	GF-5	-	GF-5
ACEA		A1-02	A1-02	A5-02	A3-02	A5-02*
Gravity, °API	ASTM D-287	34.8	35.1	34.8	34.4	33.9
Specific Gravity @ 60°F(15.6°C)	ASTM D-287	0.851	0.849	0.851	0.853	0.854
Viscosity @ 40°C, cSt	ASTM D-445	42.6	46.51	58.5	109.5	63.9
Viscosity @100°C,cSt	ASTM D-445	8.39	8.68	10.53	18.7	10.8
Viscosity Index	ASTM D-2270	175	168	172	192	157
Flash Point, °F	ASTM D-93	435	440	440	440	440
Pour Point, °C	ASTM D-97	-48	-45	-45	-42	-45
CCS Viscosity, cP (°C)	ASTM D-5293	4840(-35)	3,480 (-30)	3,980 (-30)	4,600 (-30)	3650 (-25)
MRV Viscosity, cP (°C)	ASTM D-4684	17,500 (-40)	9,600 (-35)	12,800 (-35)	23,300 (-35)	9400 (-30)
HT/HS Viscosity, cP (°C)	ASTM D-4683	2.6	2.64	3.0	4.1	3.1
Noack Volatility, %	ASTM D-5800	14	13.4	12.3	14.2	11.1

\* Meets engine protection requirements

These characteristics are typical. While future production will conform to Quaker State<sup>®</sup> specifications, variations in these characteristics may occur. The information contained herein is subject to change without notification.