

# QUAKER STATE DEFY® HIGH MILEAGE 5W-20 MOTOR OIL

SYNTHETIC BLEND MOTOR OIL

TECHNICAL DATA SHEET



Quaker State Defy® High Mileage motor oil helps engines defy time giving them more engine life\*. How? Quaker State Defy® is a synthetic blend motor oil formulated with extra anti-wear additives to help protect against the wear stresses that high mileage engines experience in everyday driving. What's more, it helps stop leaks from seals and reduces oil consumption in worn engines too.

\*Compared to industry standard Sequence IVA

## PERFORMANCE, FEATURES & BENEFITS

- Helps reduce wear for more engine life\*
- Active seal conditioning agents to keep seals pliable to prevent leaks and oil loss
- Boosted zinc additives for extra wear protection on high-wear surfaces while still protecting catalytic converter efficiencies
- Advanced thermal and oxidative stability to help reduce oil burn-off and maximize power output
- Contains additional friction modifiers for improved fuel economy.

\*Compared to industry standard Sequence IVA

## MAIN APPLICATIONS

Quaker State Defy® High Mileage 5W-20 is recommended for use in all vehicles requiring the use of SAE 5W-20 viscosity grade engine oils under all driving conditions.

## TYPICAL PHYSICAL CHARACTERISTICS

Properties	Method	Quaker State Defy® High Mileage Motor Oil
SAE Viscosity		5W-20
API Service Category		SN
ILSAC		GF-5
Density	kg/m <sup>3</sup>	ASTM D4052 853

Quaker State Defy® High Mileage 5W-20 can be mixed with other synthetic and mineral oils and is recommended for use in all vehicle applications under all driving conditions.

Always consult your owner's manual for the correct viscosity grade and performance recommendation required for your vehicle.

## SPECIFICATIONS, APPROVALS & RECOMMENDATIONS

Exceeds the requirements of the following industry specifications:

- API SN
- ILSAC GF-5

For a full listing of equipment approvals and recommendations, please consult your local Technical Help Desk.

To find the right Quaker State® product for your vehicles and equipment, please consult [www.quakerstate.com](http://www.quakerstate.com) to look-up the right motor oil recommendation using our oil selector.

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# QUAKER STATE DEFY<sup>®</sup> HIGH MILEAGE 5W-20 MOTOR OIL

## SYNTHETIC BLEND MOTOR OIL

Properties		Method	Quaker State Defy <sup>®</sup> High Mileage Motor Oil
Flash Point	°C	ASTM D93	198
Pour Point	°C	ASTM D97	-36
Viscosity	@40°C mm <sup>2</sup> /s	ASTM D445	50.0
Viscosity	@100°C mm <sup>2</sup> /s	ASTM D445	8.6
Viscosity Index		ASTM D2270	152
CCS Viscosity	@-30°C cP	ASTM D5293	5,000
MRV Viscosity	@-35°C cP	ASTM D4684	13,300

These characteristics are typical of current production. While future production will conform to Quaker State's<sup>®</sup> specification, variations in these characteristics may occur.

### HEALTH, SAFETY & ENVIRONMENT

#### Health and Safety

This Product is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from [www.epc.shell.com](http://www.epc.shell.com)

#### Protect the Environment

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

### ADDITIONAL INFORMATION

#### Advice

Advice on applications not covered here may be obtained from your Quaker State<sup>®</sup> representative.