

Premium Unleaded Gasoline

Premium unleaded gasoline is a high quality gasoline blended to meet the requirements of cars and trucks equipped with emission control devices. In addition to this, premium unleaded provides a higher octane which will help to prevent engine knock and run-on in most gasoline engines requiring unleaded gasoline.

The minimum octane (anti-knock index), (R+M)/2, for different areas of Western Canada is as follows:

Area	(R+M)/2 (Minimum)*
Coastal British Columbia	91.0
Interior British Columbia	90.5
Alberta	90.5
Saskatchewan	90.5
Manitoba	91.0

* Canadian General Standards Board

Premium unleaded gasoline is blended in both summer and winter grades. The winter grade is lighter than the summer grade to allow for easier starting in cold temperatures. The difference between the two grades is not critical during the changeover period. A summer grade premium unleaded gasoline will perform normally in colder temperatures.

Premium unleaded gasoline is blended with various additives to improve the performance in modern engines which require a high octane unleaded gasoline. They include octane boosters, antioxidant agents, and cleaning agents. These additives give premium unleaded gasoline the highest octane rating of any gasoline as well as good operating characteristics.



Typical Specifications - Premium Unleaded Gasoline

	May 1 to September 30 Summer	October 1 to April 30 Winter
Color	Green	Green
API Gravity, °	57	58
Initial Boiling Point (IBP), °C	31	25
10% Evaporated, °C	40	34
50% Evaporated, °C	97	94
90% Evaporated, °C	158	156
End Point, °C	193	193
Lead Content, grams/litre	0.0	0.0

	Sask.	Man.	Alta.	Int. B.C.	Cstl. B.C.	Sask.	Man.	Alta.	Int. B.C.	Cstl. B.C.
Research Octane	97.1	96.2	95.6	95.6	97.0	96.6	95.9	95.8	95.8	98.0
Motor Octane	85.7	86.2	85.8	85.8	86.0	85.6	86.5	85.8	85.8	85.0
Anti-knock Index $\frac{(R+M)}{2}$	91.4	91.2	90.7	90.7	91.5	91.1	91.2	90.8	90.8	91.5