



Motor Fuel Octane Labeling: Information for Retailers

BUREAU OF WEIGHTS & MEASURES

PO Box 8911
Madison, WI 53708
608-224-4942
datcp.wi.gov

RESOURCES

More information on applicable Wisconsin laws can be found at these links:

[Wis. Admin. Code ATCP 113](https://docs.legis.wisconsin.gov/code/admin_code/atcp/090/113)
docs.legis.wisconsin.gov/code/admin_code/atcp/090/113

[Wis. Stat. 100](https://docs.legis.wisconsin.gov/statutes/statutes/100)
docs.legis.wisconsin.gov/statutes/statutes/100

[Wis. Admin. Code ATCP 94](https://docs.legis.wisconsin.gov/code/admin_code/atcp/090/94)
docs.legis.wisconsin.gov/code/admin_code/atcp/090/94

[Wis. Stat. 168](https://docs.legis.wisconsin.gov/statutes/statutes/168)
docs.legis.wisconsin.gov/statutes/statutes/168

What octane and ethanol labeling is required for gas pumps?

- All gas pumps must be marked with a label indicating the octane rating of the gasoline.
- Gasoline-ethanol fuel blends of more than 2% by volume of ethanol must be labeled with the maximum volume percent of ethanol.
- Reformulated gasoline that contains an oxygenate other than ethanol must be labeled with the identity of the predominate oxygenate.
- Labels must be conspicuous, located next to the name and grade of the gasoline, and placed so the text is upright and legible.

What is required for bills of lading/delivery paperwork regarding octane and ethanol?

- All liquid fuel products must be identified as to name or grade.
- Automotive fuel, including specialty fuels such as race gas, delivered to retail outlets must include a certification of the octane rating which has been determined to meet the gasoline specifications of ATSM D4814.
- Product containing 1% or more ethyl alcohol or methyl alcohol, or both, must state the type and percentage of alcohol rounded to a whole number or half number equal to or less than the determined percentage.

How does DATCP verify octane?

Weights and Measures inspectors routinely collect fuel samples at gas stations, bulk plants, terminals, and sources across state lines for octane testing in order to ensure Wisconsin customers are getting what they're paying for.

What happens to businesses that misrepresent octane?

Enforcement action is taken when octane is misrepresented. Penalties for violations of Wis. Admin. Code ATCP 113 are up to \$10,000 per violation.

Tips for businesses:

- Check the delivery paperwork to confirm the correct product is being delivered before the product is unloaded into your tank.
- Be sure your fills are clearly labeled per API RP 1637-06 Color-Symbol System so the delivery driver can identify the fuel type in each tank.
- If you have blender pumps, ensure that your blenders are set to correctly blend to the mid-grade octane you have posted.
 - Recommended blender settings to obtain an 89 octane midgrade gasoline:
 - 50% 91 octane and 50% 87 octane (50:50 blend ratio)
 - 35% 93 octane and 65% 87 octane (65:35 blend ratio)
- Know the ethanol content of your fuel. If your ethanol content changes, be sure to update the blend ratio on your pumps.
- If you change from premium with ethanol to premium without ethanol, or vice versa, be sure to change the octane decals on your pumps.
- If you suspect you've received delivery of the wrong octane, contact our department immediately at (608) 224-4942 or datcpweightsandmeasures@wi.gov.

Prohibited Practices:

- Any fuel that is misidentified as to name or grade cannot be sold in Wisconsin per [Wis. Stat. §168.14\(2\)](#).
- Sellers of automotive gasoline may not use any methods of competition or trade practices that mislead prospective purchasers as to the octane rating per [Wis. Admin. Code § ATCP 113.01](#).
- No one may represent that a gasoline has a specified octane rating unless the rating has been determined by a test method authorized under Wisconsin Administrative Code ATCP 94 per [Wis. Admin. Code § ATCP 113.01\(1\)](#).