

TABLE 1 PFI Fuel Grade Requirements

| Fuel Property | Residential/Commercial Densified Fuel Standards - See Notes 1 - 9 | | | |
|------------------------------------|---|---------------|---------------|---------------|
| | PFI Super Premium | PFI Premium | PFI Standard | PFI Utility |
| Bulk Density, lb./cubic foot | 40.0 - 46.0 | 40.0 - 46.0 | 38.0 - 46.0 | 38.0 - 46.0 |
| Diameter, inches | 0.250 - 0.285 | 0.250 - 0.285 | 0.250 - 0.285 | 0.250 - 0.285 |
| Diameter, mm | 6.35 - 7.25 | 6.35 - 7.25 | 6.35 - 7.25 | 6.35 - 7.25 |
| Pellet Durability Index | ≥ 97.5 | ≥ 97.5 | ≥ 95.0 | ≥ 95.0 |
| Fines, % (at the mill gate) | ≤ 0.50 | ≤ 0.50 | ≤ 0.50 | ≤ 0.50 |
| Inorganic Ash, % - See Note 1 | ≤ 0.50 | ≤ 1.0 | ≤ 2.0 | ≤ 6.0 |
| Length, % greater than 1.50 inches | ≤ 1.0 | ≤ 1.0 | ≤ 1.0 | ≤ 1.0 |
| Moisture, % | ≤ 6.0 | ≤ 8.0 | ≤ 8.0 | ≤ 10.0 |
| Chloride, ppm | ≤ 300 | ≤ 300 | ≤ 300 | ≤ 300 |
| Ash Fusion - See Note 8 | NA | NA | NA | NA |
| Heating Value - See Note 1 | As-Rec. ± 2SD | As-Rec. ± 2SD | As-Rec. ± 2SD | As-Rec. ± 2SD |

Table 1 Notes:

1. There is no required value or range for Heating Value. It is required to print the mean higher heating value in BTU per pound as well as the ash content on the fuel bag label using a bar scale to represent the mean value ± 2 Std. Dev. See note 9.
2. The bag must be labeled indicating which PFI grade of material is in the bag. See note 9.
3. The bag label must also disclose the type of materials as well as all additives used. For purposes of this standard specification, additives are defined in 3.1.10. See note 9.

4. It is required that manufacturers include on their bags the PFI logo and in a printed block the guaranteed analysis of the fuel. See note 9.
5. PFI prohibits the use of any chemically treated materials. For purposes of this standard specification, chemically treated materials are defined in 3.1.11.
6. The following applies to all limits in this table: For purposes of determining the fuel grade, all properties must fall at or within the specified limits listed for a particular grade. Observed or calculated values obtained from analysis shall be rounded to the nearest unit in the last right-hand place of the figures used in expressing the limit in accordance with ASTM E 29-06b *Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications*.
7. It is the intent of these fuel grade requirements that failure to meet any fuel property requirement of a given grade does not automatically place a fuel in the next lower grade unless it meets all requirements of the lower grade.
8. It is required to report ash fusion properties at a frequency as specified in the PFI *Quality Assurance/Quality Control (QA/QC) Program for Residential/Commercial Densified Fuels*.
9. Refer to PFI *Quality Assurance/Quality Control (QA/QC) Program for Residential/Commercial Densified Fuels* for specific labeling requirements for fuel properties and other information.